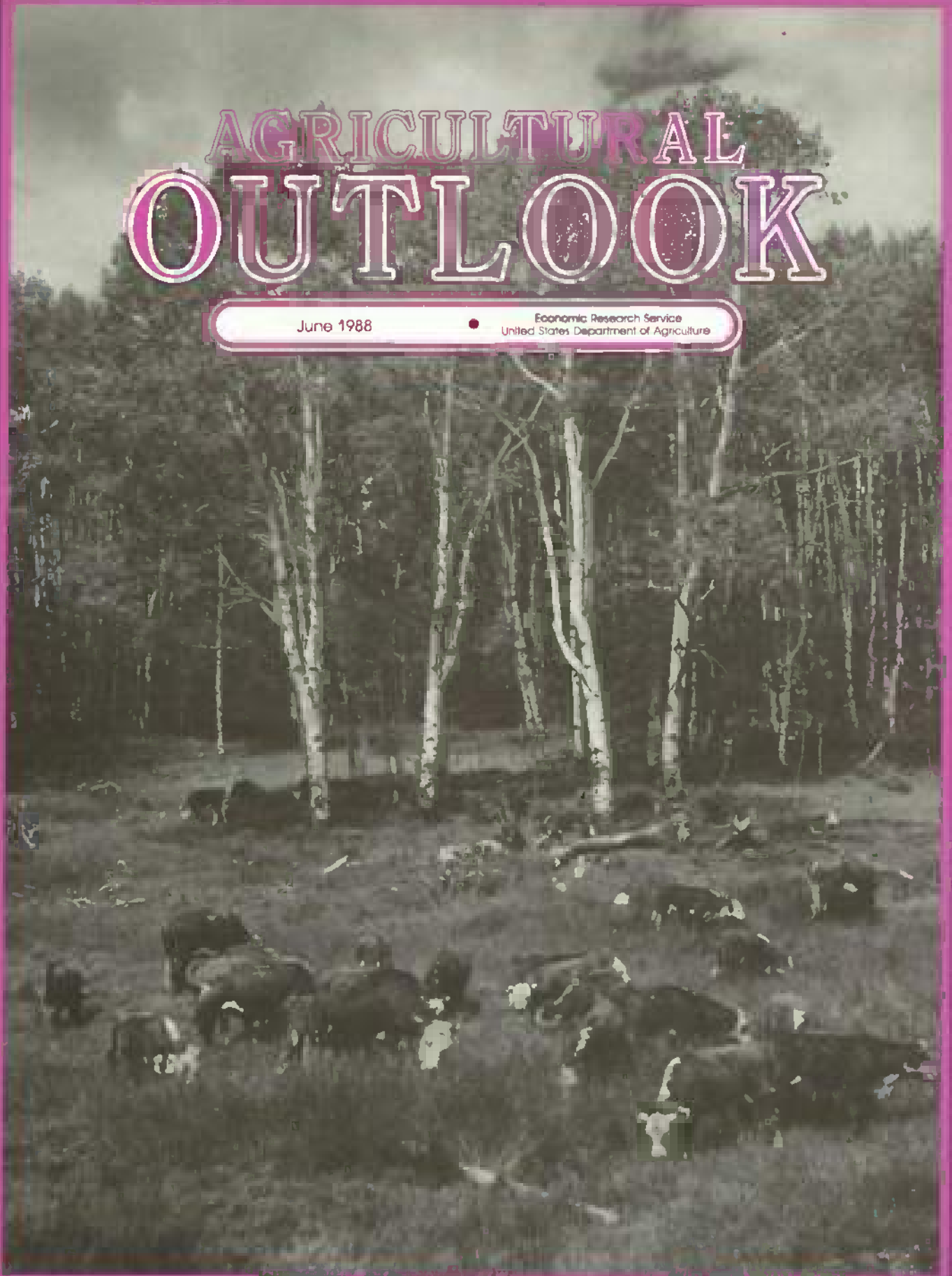


# AGRICULTURAL OUTLOOK

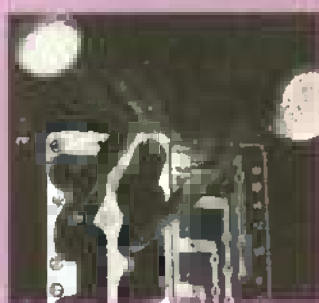
June 1988

• Economic Research Service  
United States Department of Agriculture



# AGRICULTURAL OUTLOOK

June 1988/AO 142



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## In Brief . . . News of the Economic Outlook, Food Prices, 1988 Soviet Grain

Real GNP grew at an annual 2.3-percent rate in the first quarter of 1988. Led by robust consumer spending, continued strength in exports, and vigorous business investment, economic growth has pushed capacity utilization up and pulled the unemployment rate down to the lowest in 14 years. This stable and supporting macroeconomic environment—combined with an improved farm credit situation, expanding farm exports, and stabilizing land values—has brightened the overall picture for U.S. farmers.

Soviet grain production may total 215 million tons in 1988/89, surpassing the past 2 years and marking the first time ever that Soviet output will have topped 200 million tons for 3 consecutive years. Area is up a little from last year's relatively low total, and yield could reach 1978's record. Although coarse grain production is forecast down slightly from last year's relative high, wheat production is projected 10 percent above the reduced crop of 1987/88. Grain imports likely will be down from last year's high.

First-quarter U.S. food prices rose 3.1 percent above a year earlier, with much of the increase due to fruit, vegetables, and fish. Prices paid in restaurants and fast food outlets rose a little faster than prices for food at home. For the year, food prices will average 2 to 4 percent above 1987.

The marketing bill—the difference between consumer food expenditures and the farm value of domestically produced farm foods—is forecast to rise 6.6 percent in 1988, compared with 4.7 percent last year. While food expenditures will



rise 4.8 percent, about the same as the pace last year, the farm value of food is expected to decline 1 percent, because of bigger supplies and lower prices for livestock and poultry products.

Livestock and poultry prices have been relatively high through mid-May. However, larger supplies, particularly of poultry products and pork, should put downward pressure on prices through midsummer, reducing growers' returns. Total red meat and poultry cold storage stocks at the beginning of the spring quarter were 26 percent above a year earlier and 32 percent above 2 years earlier.

Hog inventories continue to increase slowly, stimulated by 2 years of consistently favorable returns. Since June 1986, when the expansion began, the number of hogs kept for breeding in the 10 quarterly reporting States has risen 11 percent, to 5.42 million head as of March 1.

With increased production and lower prices, returns in the hog sector likely

will be down substantially from 1987's favorable level. After a seasonal rise in late spring and early summer, returns will decline to near breakeven before the end of the third quarter. In the fall, some negative returns are possible.

World grain production in 1988/89 should partly recover from the drop registered for 1987/88, but it will remain below the record of 1986/87. Rice, which was hit by drought in 1987/88, should show the largest gain. World grain trade will show little change, as lower wheat trade nearly offsets the expansion expected for rice and coarse grains.

U.S. grain and soybean prices are strengthening further this year. Increased export and domestic use of grains will continue to draw down stocks. Planting conditions are generally favorable and planting intentions are only marginally smaller than last year. These factors indicate increased 1988/89 production.

This year's 3-percent increase in the value of U.S. farmland reverses the slide that began in 1982. The strongest rise was in the Northeast and the Corn Belt; decreases continued in some of the Western and Southwestern States. The outlook is for further increases in land values, at a rate near the pace of inflation.

Aquaculture now provides 3 to 5 pounds per year of fish and other edible aquatic products for each person in the United States. Almost 90 percent of aquacultural production is of four species—catfish, crawfish, salmon, and trout.



## Agricultural Economy

After more than 5-1/2 years of expansion, the general economy is showing surprising strength. Over the last year or so, exports and business investment have led economic growth, pulling the U.S. manufacturing sector out of its doldrums. This has pushed capacity utilization up and pulled the unemployment rate down to its lowest level in 14 years. While there are some inflation concerns, nothing as yet suggests a return to double-digit price increases.

This stable and supporting macroeconomic environment, combined with an improved farm credit situation, expanding farm exports, and stabilization of land values, has brightened the overall picture for U.S. farmers.

In the midst of good news, it is easy to forget that many observers have regarded this expansion as more fragile than other recent expansions. The current expansion has often seemed built on a wobbly base of international and domestic policy coordination and, in the final analysis, a bit of luck.

Because the economy has only recently begun making progress on the "twin deficits" (Government and balance of payments), and because considerable improvement remains to be made, the expansion is vulnerable to unexpected events.

### Some Policy Options Closed

The expansion is vulnerable because it is operating with some policy options closed. Fiscal and monetary policies are traditional domestic macroeconomic tools. Fiscal policy—tax cuts and spending increases—helped pull the economy out of the 1982 recession. But one legacy was a large Federal budget deficit which, in contrast to budget deficits in earlier expansions, increased as the economic growth continued. Deficit spending worked, but the resulting large deficit means that the fiscal option is not available if it is needed again in the near future.

The passage of the Gramm-Rudman-Hollings Amendment in late 1985 signaled broad-based political support for tighter fiscal policy. With fiscal policy aimed at reducing spending to bring the deficit down, unexpected economic developments—which might in other circumstances suggest further tax cuts and spending increases—would have to be met in other ways.

Monetary policy remains the domestic tool available to deal with whatever contingencies have to be met. However, one tool cannot, in general, meet conflicting objectives. And this is where luck has helped out. The Federal Reserve has not yet been seriously confronted in this expansion with the need to achieve simultaneously the two conflicting goals of low inflation and low unemployment.

To reach twin targets for unemployment and inflation, monetary and fiscal policies must be orchestrated so that both goals are reached simultaneously. Either monetary or fiscal policies can be used to fight inflation, but they can have opposite effects on interest rates and the exchange rate. Thus, even a policy mix that would otherwise achieve domestic inflation and unemployment goals could cause international relationships to worsen.

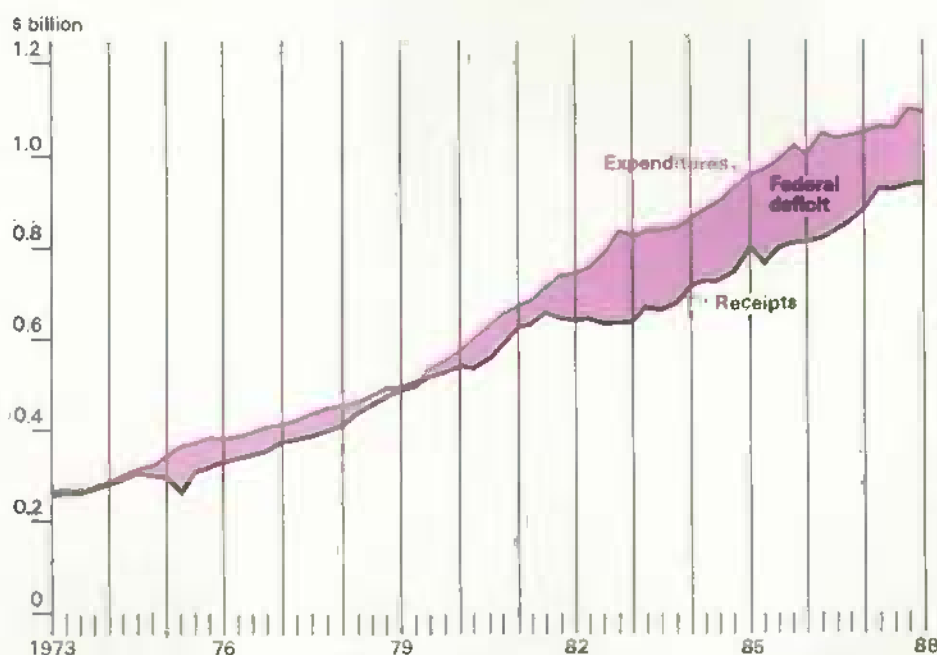
### Falling Oil Prices Helped

Falling oil prices illustrate how fortunate the economy has been. In 1986, the dollar was dropping in earnest. This should have put upward pressure on the U.S. price level, and the Federal Reserve would have been forced to decide whether to slow the economy down or to suffer inflation. Falling oil prices helped cushion the impact of the falling dollar on the U.S. price level, easing pressure on the Fed to rein in the expansion.

Falling oil prices also helped international adjustment. Foreign producers' costs shrank not only because oil prices were going down, but also because oil is usually priced in dollars, which were becoming less expensive. Falling costs helped foreign producers to absorb the falling dollar and still make profits in their own currency.

At the same time, however, falling costs abroad probably lengthened the time necessary for trade volumes to adjust.

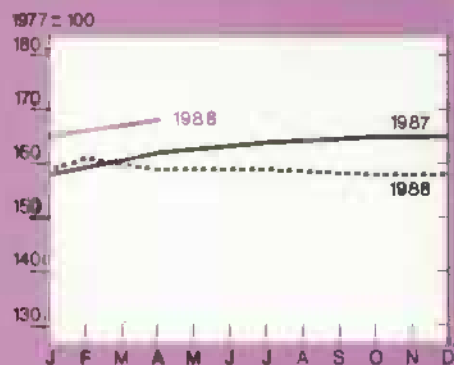
After Widening Dramatically, Federal Deficit Begins To Narrow



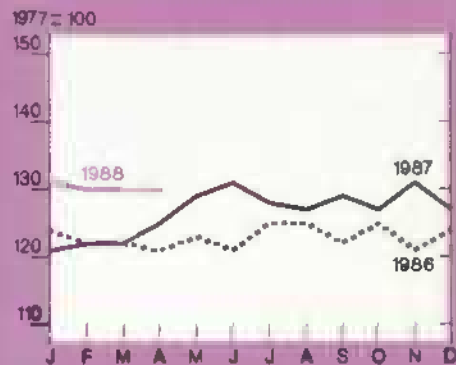


# Prime Indicators of the U.S. Agricultural Economy

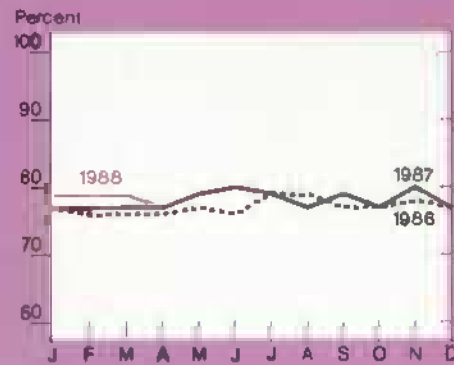
Index of prices paid by farmers<sup>1</sup>



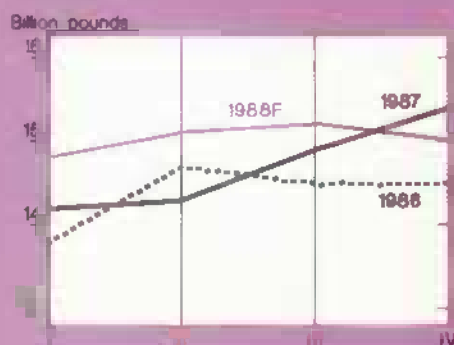
Index of prices received by farmers<sup>2</sup>



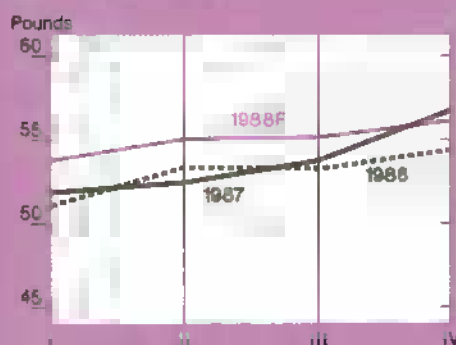
Ratio of prices received to prices paid



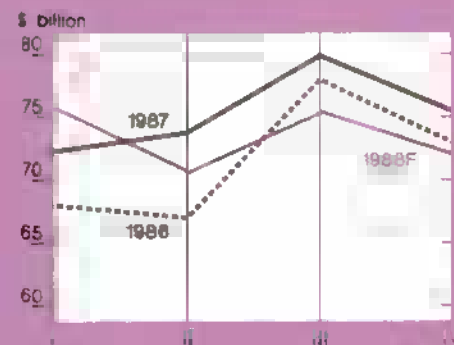
Red meat & poultry<sup>3</sup>  
production



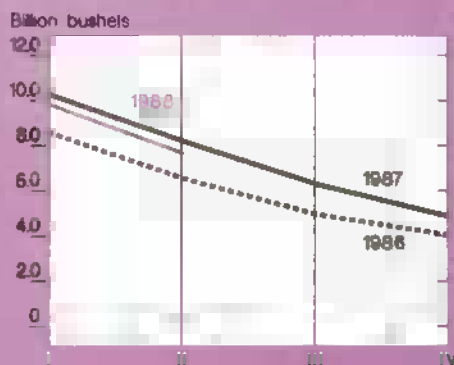
Red meat & poultry  
consumption, per capita<sup>3,4</sup>



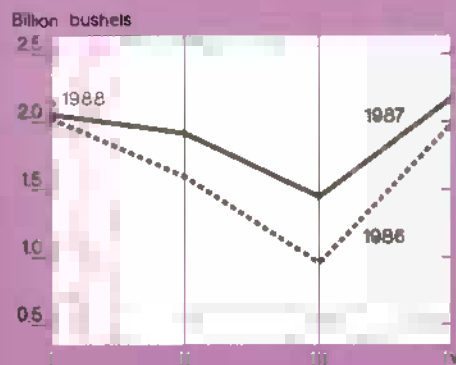
Cash receipts from  
livestock & products<sup>5</sup>



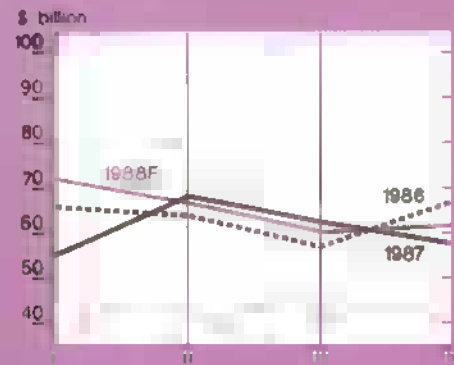
Corn beginning stocks<sup>6</sup>



Corn disappearance<sup>6</sup>



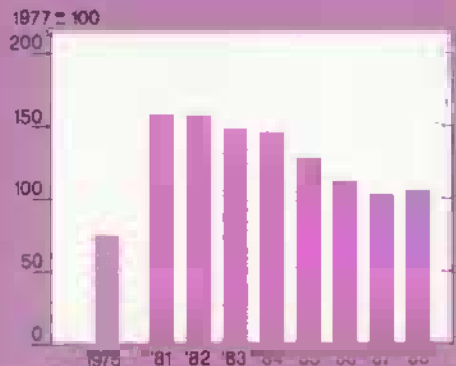
Cash receipts from crops<sup>5</sup>



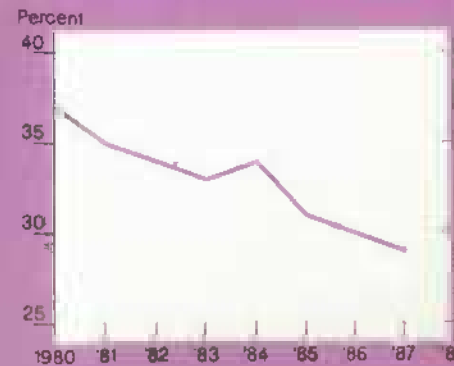
Farm net cash income



Farm real estate values



Farm value/retail food costs



<sup>1</sup>For commodities and services, interest, taxes and wages. Beginning in 1986, data are only available quarterly. <sup>2</sup>For all farm products.

<sup>3</sup>Calendar quarters. Future quarters are forecasts for livestock, corn, and cash receipts. <sup>4</sup>Retail weight. <sup>5</sup>Seasonally adjusted annual rate.

<sup>6</sup>I = Dec.-Feb., II = Mar.-May, III = June-Aug., IV = Sept.-Nov., F = forecast.

This slow trade adjustment may have helped by allowing time for foreign countries to realign their policies and become less dependent on exports to the United States. Japan's recent boom in domestic consumer spending is evidence that at least some of that realignment has been successful.

An abrupt fall in the value of the dollar without the amelioration of shrinking oil prices might have confronted foreign producers with an abrupt fall in demand without a fall in costs—forcing a wrenching adjustment and, in the short run, forcing their economies toward stagnation or decline. That would probably have hurt U.S. exports in the short run—including agriculture.

### ***U.S. Creditors Watch Border Policies***

Monetary and fiscal policies can deal with domestic issues, but in an open, international economy, exchange rates and border policies (such as trade agreements, export subsidies, and capital flow restrictions) are also important. Rising imports have dominated sluggish exports in widening the U.S. merchandise trade deficit from \$35 billion to \$160 billion per year during this expansion. Some of the import rise was for food products, but most was for manufactured goods.

The other side of a net goods inflow was an outflow of U.S. promises to make future payment. This became a way of financing the Federal deficit and of paying for imports; it also means that part of future tax receipts will be sent to foreigners through interest payments. And it raises the question of what we are to do if the holders of all this debt suddenly no longer want to hold it.

Because policymakers have to be wary of U.S. creditors' concerns about border policies, the large deficit in the balance of payments has limited our flexibility in border policies just as the Government deficit has in fiscal policies.

Political realities have also made the current expansion vulnerable. The high trade deficit sparked a rising protectionist sentiment. Policymakers could

identify groups hurt substantially by the rising dollar; the more numerous beneficiaries, whose individual gains were small, were harder to identify and are not politically mobilized.

Most economists contend that protectionist legislation would hurt the economy in the long run, by protecting inefficient domestic producers and denying U.S. consumers lower cost foreign substitutes. In the short run, protectionism helps as long as there is no retaliation. Foreign retaliation could hurt the economy almost immediately by depriving U.S. exporters of their foreign markets.

The macroeconomic problem is three-dimensional: inflation, unemployment, and the balance of payments. Its resolution requires careful orchestration of three policy instruments: monetary, fiscal, and border.

As long as the expansion stays in balance, the loss of some of these options may not matter because the twin deficits will lessen as the economy grows, and the policy options will widen. This is the likely outcome. But the situation is fragile; if the unexpected occurs, implementing a balanced, three-dimensional solution would be particularly difficult. [Clark Edwards (202) 786-3313 and Ralph Monaco (202) 786-1782]

## **LIVESTOCK OVERVIEW**

Livestock and poultry prices were relatively high through mid-May. However, larger supplies should put downward pressure on prices through midsummer. Supplies are expected to decline below a year earlier from late summer through 1989, resulting in stronger prices then, particularly for beef.

Cold and wet winter weather held fed cattle marketings below intentions reported in the *January Cattle on Feed* report, and pork and poultry cold storage stocks rose sharply. Fed cattle marketings this spring are likely to be 6 percent above a year ago. Slaughter weights are record high, although feedlot marketings remain current.

Total cold storage stocks of red meat and poultry at the beginning of the spring quarter were 26 percent above a year ago and 33 percent above 2 years ago, so more pork and poultry production will be pushed onto the market this spring and summer. Red meat production this spring is expected to average 4 to 5 percent above a year earlier.

### ***Hog Profits Likely To Slip***

Hog inventories continue to increase slowly, stimulated by 2 years of consistently favorable returns. Since June 1986, when the expansion began, the number of hogs kept for breeding in the 10 quarterly reporting States has risen 11 percent, to 5.42 million head as of March 1.

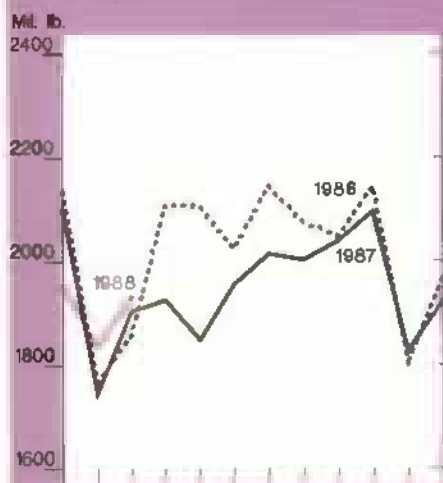
The buildup has been slow by historical standards, possibly restrained by reduced availability of capital, a more concentrated industry structure, and a cautious attitude among pork producers.

The caution may have been heightened by a recent downturn in profitability, which is reflected in farrowing less than producers' earlier intentions. Barrow and gilt prices fell to the low \$40's per cwt last November and, except for a brief respite in February, remained there through April. Then in May prices rose into the the \$50's. Consequently, feeding margins have been small.

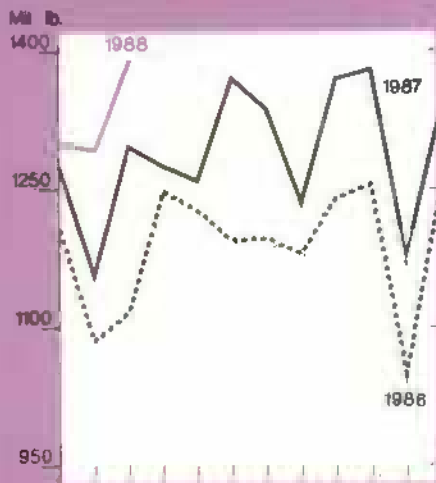
December-February farrowing intentions in the 10 States as of December 1 were

## Production of Livestock and Products

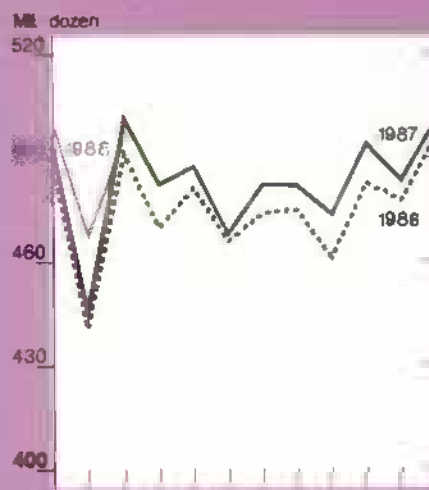
Commercial beef production



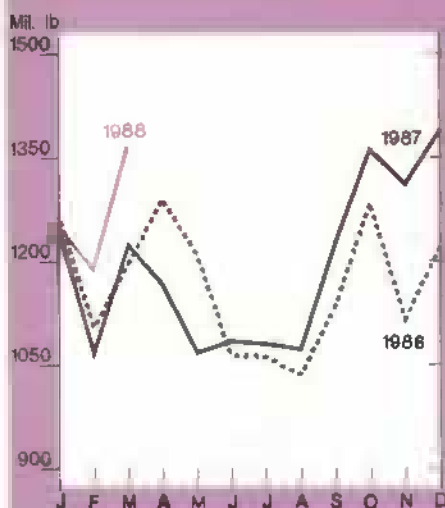
Broiler production<sup>1</sup>



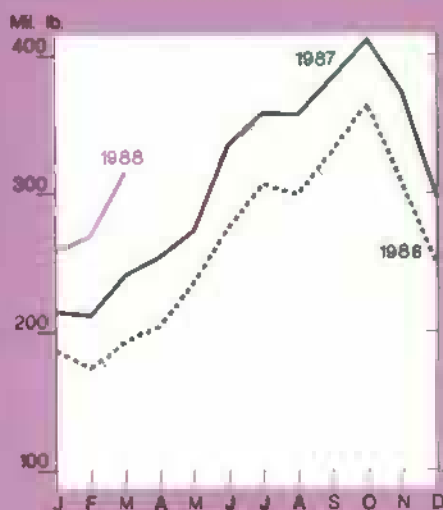
Egg production



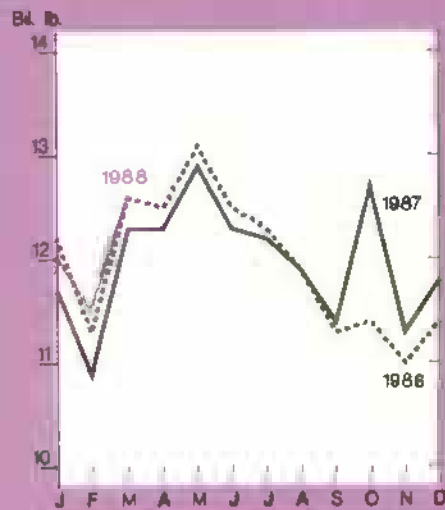
Commercial pork production



Turkey production<sup>1</sup>



Milk production



<sup>1</sup>Federally inspected production, ready-to-cook.

10 percent larger than a year earlier, but actual farrowings turned out to be only 6 percent larger. March-May intentions did not change between December and March, showing an increase of only 2 percent from a year earlier. Intentions for June-August 1988 were also up only 2 percent from 1987.

If the low intentions are realized, pork production is expected to plateau in fourth-quarter 1988 through first-quarter 1989.

Profits in the hog sector likely will be down substantially from 1987's favorable level. After a seasonal rise in late spring and early summer, returns

will decline to near breakeven before the end of the third quarter. In the fall, some negative returns are possible.

The March 1 breeding herd was up 4 percent from a year earlier. The 10-State inventory of all hogs and pigs, at 40.5 million head, was 6 percent larger. Hogs intended for market totaled 35.1 million, also an increase of 6 percent.

### Broiler Growth Slows Down

Slower growth in broiler production is expected for the rest of 1988. Net returns were below breakeven from October through February, but were far above breakeven during May.

Higher feed costs probably will put downward pressure on net returns, although prices are expected to be above breakeven through the third quarter. In addition, many of the hatching-egg-flock indicators show a slower increase in production during the year.

Broiler production during 1988 is forecast to increase 5 percent. First-quarter production was about 7 percent larger than a year earlier. Average slaughter weights during the quarter were more than 1 percent above the same period in 1987, continuing a trend toward higher weights.



February and March hatch were both 6 percent above a year earlier. April weekly broiler chick placements were nearly 3 percent above 1987, so production in the second quarter may approach 7 percent above a year before.

The hatching egg flock on April 1 was 2 percent above a year earlier. The flock is comprised mainly of broiler-egg layers. Third-quarter poultry meat production is expected to be 5 percent above a year earlier.

The estimated broiler hatchery supply flock is a longer term indicator of broiler production than the current hatching egg flock. The estimate of the broiler hatchery supply flock for October 1988, based on pullets placed 7-14 months earlier, is 1 percent below the year earlier estimate. This is an indicator of December slaughter. Fourth-quarter production will likely be only 2 percent above a year earlier.

The 12-city wholesale composite price for broilers was 45 cents per pound in the first quarter, compared with 50 cents a year earlier. Prices may be up slightly in the second quarter, averaging in the 46-50 cent range. April's average price was 49 cents, similar to a year earlier.

Prices will remain high because of increased summer demand related to barbecuing and vacationing, but they will be tempered by large supplies of all meats during the third quarter. Prices are expected to average 44 to 50 cents.

Fourth-quarter prices will soften seasonally, averaging in the 40-46 cent range. The average price for 1988 is expected to be 43-49 cents, compared with 47 in 1987.

#### ***Turkey Production May Level Off***

First-quarter turkey production, at 835 million pounds, was a steep 25 percent ahead of a year earlier, but the increases appear to be slowing. Poult placements indicate that second-quarter production will be about 13 percent above a year ago. Increases in third- and fourth-quarter production may reach only 4 percent above a year earlier.

The most recent hatch indicated that placements during April 1988 were 8 percent below a year before. Cumulative

placements for slaughter during September 1987-April 1988 were 7 percent ahead of a year earlier. These placements are early indicators of slaughter during the first 6 to 9 months of 1988. Eggs in incubators on May 1 were 5 percent below a year earlier.

Turkey stocks, at 353 million pounds on April 1, were approximately 56 percent greater than a year earlier. The higher stocks are putting downward pressure on prices during the second quarter. These bigger stocks, coupled with greater year-over-year production of turkey and other meats, will continue to pressure prices in the third and fourth quarters.

Wholesale prices for Eastern region hen turkeys during the first quarter averaged 49 cents per pound, down from 58 in 1987. Prices were sluggish in April, averaging 47 cents. Prices are expected to average in the 46-50 cent range during the second quarter.

Turkey prices are expected to rise seasonally as buyers increase holiday purchases during the third and fourth quarters, although ample supplies of poultry and pork will buffer the rise. Third-quarter prices likely will average 52 to 58 cents. Prices for all of 1988 are expected to average 49-55 cents, down from 58 in 1987.

#### ***Egg Returns Disappoint Producers***

Net egg returns for the first quarter showed a loss of 7.8 cents per dozen. Low returns continue to disappoint producers and have led to a reduction in output. Recent publicity concerning salmonella inside eggs may put further pressure on already depressed prices.

Production during 1988 is expected to fall less than 1 percent, although per capita consumption is expected to fall 2 percent to 244 eggs. First-quarter production, at 1462.6 million dozen, was 1.5 percent greater than a year earlier.

The U.S. flock on April 1 was about 2 percent below a year earlier. This was a direct result of increased slaughter of light-type hens during November 1987-March 1988. Egg production per 100 layers was the same as a year before.

Production in the second quarter likely is running 1 percent below a year earlier. Output is expected to continue decreasing in the third and fourth quarters, with declines of nearly 2 and 1 percent, respectively.

New York wholesale grade-A large egg prices are forecast to average 56-62 cents per dozen for all of 1988, below the 62-cent average of 1987. Prices averaged 55 cents for the first quarter, compared with 65 in the same quarter of 1987.

Second-quarter average prices are expected to be 50-54 cents. Prices are projected to rise during the second half because of heavier holiday baking and lower production.

#### ***U.S. Poultry Exports Rising***

U.S. broiler exports for January-February 1988 were up 15 percent from a year earlier. However, future exports to Iraq and Egypt, major importers under EEP in 1987, are uncertain. These countries have recently increased production, and producers there are pressuring their governments for protection against imports.

Increased competition from other broiler exporters, particularly the EC, could also slow down U.S. exports. Sharp drops in sales to Iraq and Egypt, and growth in other markets at the current rate of about 18 percent, would result in an increase of 5 percent or less in 1988 U.S. broiler exports over the 1987 record of 752 million pounds. If the surprising strength in U.S. broiler prices, seen in April and May, continues, it will weaken the export outlook.

U.S. turkey exports for January-February 1988 are up sharply, and for the year they are expected to be about 30 percent above the 33 million pounds exported during 1987. Almost every importing country is taking more U.S. turkey this year. Low prices and the less expensive dollar are making U.S. turkey competitive in many countries.

Mature chicken exports for January-February 1988 were up 99 percent over a year earlier, mainly because of increases to Japan and other East Asian countries. Also, two EEP initiatives have boosted



the potential for 1988's exports to exceed 1987's 16 million pounds by about 90 percent.

U.S. egg exports for January-February 1988 are running well ahead of a year earlier. While exports of table eggs to Iraq under the EEP may drop from 1987 because of increased Iraqi production, the overall outlook is for increased exports to most countries during 1988.

Low U.S. prices and the lower dollar have made U.S. eggs more competitive. In March, 1988 the EC raised its export subsidy on table eggs by 6.7 percent. U.S. exports of eggs in 1988 are estimated to be up about 12 percent from 1987's 111 million dozen.

#### ***Fed Cattle Marketings Up 6 Percent for Spring***

Cattle on feed on April 1 in the 13 quarterly reporting States were 6 percent above a year earlier, at nearly 9.4 million head. Nearly 45 percent of the steers and 27 percent of the heifers weighed above 900 pounds, up sharply from April 1987. Spring-quarter fed cattle marketings could be up 6 percent from a year earlier, to over 5.9 million head, the largest April-June marketing since 1978.

Net placements during the first quarter were 2 percent above a year earlier and 9 percent above 1986. This was the largest for the quarter since the 1978 record.

Marketings during the winter quarter were up only 1 percent, although large numbers of cattle on feed were in the heavier weight groups at the beginning of the quarter. Reduced rates of gain from harsh winter weather slowed marketings.

April marketings of fed cattle in the 7 monthly reporting States were 5 percent above a year earlier, while net placements were down 9 percent. Cattle on feed on May 1 were up 4 percent from a year earlier.

Increased fed cattle marketings this spring are offsetting a large share of the expected decline in nonfed cattle slaughter. Commercial cow slaughter could be down another 5 percent from the first quarter, with nonfed steer and heifer slaughter down 7 percent.

Second-quarter cattle slaughter is expected to be up seasonally from the winter quarter to 8.7 million head; however, this is down 2 percent from a year earlier and the lowest since 1982.

Second-quarter beef production will not decline as much as the number of head slaughtered, because of the higher proportion of fed cattle in the slaughter mix and the heavier weights. Federally inspected dressed slaughter weights were a record 664 pounds during the first quarter. Dressed steer weights averaged 2 pounds heavier, with heifers unchanged from a year earlier. Cow weights were up 14 pounds and bull weights up 42.

Weights are expected to remain high, near the first-quarter average through the spring, before falling several pounds during the second half of the year. For 1988, beef production is expected to total about 22.7 billion pounds, 3 percent below 1987.

Larger fed cattle marketings over the next several months are expected to pressure fed cattle prices. Choice steer prices at Omaha likely will peak in the middle \$70's this spring and may decline to the upper \$60's per cwt shortly thereafter. Large supplies of competing meats will help hold down prices.

The next run of stronger cattle prices likely will occur from this fall through mid-1989, as feeder cattle supplies begin to tighten. The supply of yearling cattle outside feedlots on April 1 was unchanged from a year earlier, while supplies of lighter weight calves were down nearly 10 percent.

Imports of feeder cattle from Mexico arrived later than usual this winter and were 60 percent above a year earlier. These imports have partially offset the reduced supply of domestic feeder cattle.

Feeder cattle supplies should begin to tighten by fall, and stocker cattle prices likely will strengthen into the low \$80's per cwt. This price movement is in contrast to that of past years. However, declines in the inventory of light cattle will force feedlots to bid higher prices for placement-weight cattle. This scenario should keep feeder cattle prices higher through at least the first half of 1989.

#### ***1988 Milk Production May Set Record***

January-March milk production rose 2.5 percent from a year earlier on a daily average basis. Milk cow numbers averaged 10.3 million head, down 1 percent from a year earlier and close to the average of the second half of 1987. Since early 1986, cow numbers on farms not participating in the Dairy Termination Program have been about steady.

Daily milk per cow rose 3.9 percent from January-March 1987, a relatively large increase but much smaller than the extraordinary gains of late 1987.

The gains in milk per cow from a year earlier are narrowing. Based on data for 21 States, the increases dropped from almost 5 percent in January to 3.2 percent in April.

This slowing probably represented the effects of 1988's lower milk-feed price ratio and an unusual winter pattern a year earlier that favored high output per cow. On April 1, concentrates fed per milk cow were up 1 percent, less than increases reported during most of 1987.

On a daily average basis during January-March, the Lake States produced almost 4 percent more milk than a year earlier, while output in the Corn Belt and Northeast regions was about the same as last year. Most States in the six Western and Southern regions produced larger amounts than a year earlier.

Milk production during the rest of 1988 is likely to be dominated by growth in output per cow, with little change in cow numbers. Expected milk-feed price ratios probably will support trend increases in milk per cow.

However, the large recent gains are not expected to be sustained, and rises are likely to diminish as 1988 progresses. Late-1988 output per cow might show a relatively small increase from the strong levels of late 1987. For all of 1988, milk production probably will rise 2-3 percent to a record high.

**For further information, contact:**  
Kevin Bost and Leland Southard, hogs;  
Mark Weimar and Larry Witucki,  
broilers, turkeys, and eggs; Steve Reed,  
cattle; and Jim Miller, dairy. All are at  
(202) 786-1285.

## FIELD CROP OVERVIEW

### *First 1988/89 Estimates Issued in May*

World grain production in 1988/89 should partly recover from the drop registered for 1987/88, but it will remain below the record of 1986/87. Rice, which was hit by drought in 1987/88, should show the largest gain.

World grain trade will show little change, as lower wheat trade nearly offsets the expansion expected for rice and coarse grains.

World oilseed production will increase again, but the gain will be less than last year.

World cotton production is expected to pick up as foreign acreage expands; larger foreign crops and a slowdown in consumption will probably lead to a modest decline in world cotton trade.

USDA's May release of 1988/89 country-specific estimates for wheat and coarse grains will be followed in July with details for rice, cotton, and oilseeds.

In the United States, planting conditions are generally favorable and planting intentions are only marginally smaller than last year. These factors indicate increased 1988/89 production. Increased wheat and feed grain use will continue to draw down stocks. Except for winter wheat, USDA's first forecast of yield and production for domestic crops will be published in July and August.

### *World Wheat Production Gains*

World wheat production in 1988/89 is expected to increase 3 percent from 1987/88. With consumption growing by a larger amount, world ending stocks will drop again this year and prices are expected to climb.

The Soviet Union is the largest single factor in the foreign wheat outlook for 1988/89. Soviet output is expected to increase 10 percent, as both area and yield rebound from the effects of last year's poor weather. This recovery accounts for over half of the 14-million-ton gain projected for foreign wheat output.

With larger wheat production and a total grain crop projected at 215 million tons, the largest since 1978, the Soviets are expected to import only 15 million tons of wheat, 7 million less than 1987/88. (See the special article "Soviet Grain Forecast for 1988: 215 Million Tons".)

Lower Soviet purchases are the major change in the world market, where trade is expected to be down 5 million tons from the 1987/88's 105 million (excluding intra-EC trade). Purchases by most other major importers are steady or up; the biggest gains in imports are expected in India and Pakistan, where food grain stocks have been drawn down following last year's drought.

While U.S. competitors will produce more wheat, the worldwide gain is expected to be relatively small. Since beginning stocks held by the major competitors are lower than they were in 1987/88, a small decline in competitor exportable supplies is projected. This helps limit the drop in U.S. exports, which are forecast to fall 100 million bushels to 1.5 billion.

Exports will again depend partly on U.S. programs, particularly the Export Enhancement Program. U.S. bonuses dropped in recent months as world market supplies tightened. Competitive pressures may increase again as Northern Hemisphere exporters harvest their crops this summer.

U.S. wheat production (all classes) is projected at 2.17 billion bushels, 3 percent above the outturn in 1987/88, mostly because of higher yield. Wheat acreage reduction program requirements for 1988/89 are identical to those of 1987/88. Market prices for 1988/89 are forecast at \$2.80-\$3.20 per bushel, stronger than the previous season, and likely will be the highest since 1985/86. At these prices, the gap between market price and the loan rate will be the largest since 1980/81.

Domestic consumption is projected to remain steady. Forecast consumption of slightly above 1.1 billion bushels is about the level of 1985/86 and more than 6 percent below the 1986/87 peak. Slightly expanded food, seed, and industrial uses are expected to more than offset declines in the feed and residual category.

Beginning wheat stocks for 1988/89 will be down by a third from a year earlier. This, coupled with some expected decline in exports from 1987/88 and slightly lower domestic use, likely will result in another drop of more than a third in ending U.S. stocks.

Ending stocks on June 1, 1989 likely will be about 800 million bushels, the lowest since 1975-76. This will bring stocks down to about 70 percent of domestic use. This will be the first time stocks have been below domestic use since 1975/76 and will bring the stocks-to-use ratio down to 0.30, the lowest since 1974/75.

### *Rice Trade Will Recover*

With normal weather, foreign 1988/89 rice production is expected to increase 7 percent. Last year's drop was largely brought on by a weak and late monsoon in South and Southeast Asia. With the U.S. crop also recovering, world production is projected at a record 325 million tons.

As the larger harvest in the rice exporting countries nears, prices are likely to drop and the volume of world trade should pick up. U.S. exports are forecast to increase to 77 million cwt in 1988/89.

### *Coarse Grain Output Rising*

Larger foreign crops of sorghum and corn, together with a projected increase in the U.S. corn crop, are expected to contribute to a 2.5-percent gain in world production of coarse grains in 1988/89.

World consumption of coarse grains is expected to surpass production for the second consecutive year. Unlike wheat, however, coarse grain stocks will remain large and price increases will be modest. Only a 3-percent rise in trade is expected, despite attractive prices. The 86 million tons of coarse grain trade projected for 1988/89 (excluding intra-EC trade) is 22 million below the record of 1980/81.

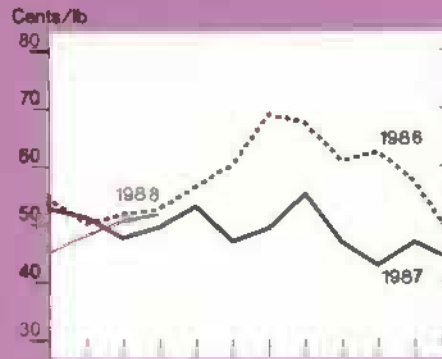
The largest output gains this year are expected from recovering coarse grain production in Eastern Europe, India, and Thailand. The largest drop will come in the USSR, where barley output will fall

# Commodity Market Prices

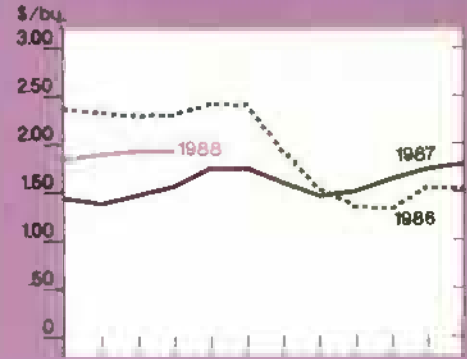
Choice steers, Omaha



Broilers, 12-city average



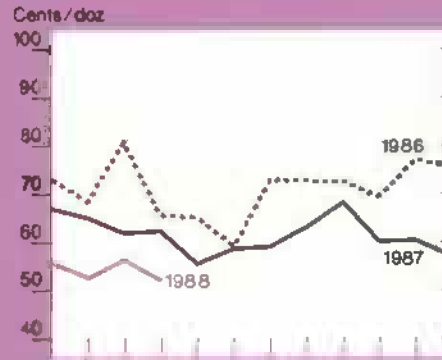
Corn, Chicago<sup>3</sup>



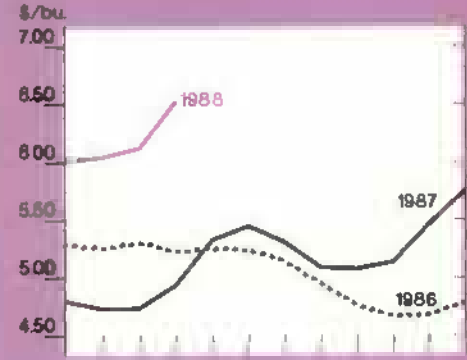
Feeder cattle, Kansas City<sup>1</sup>



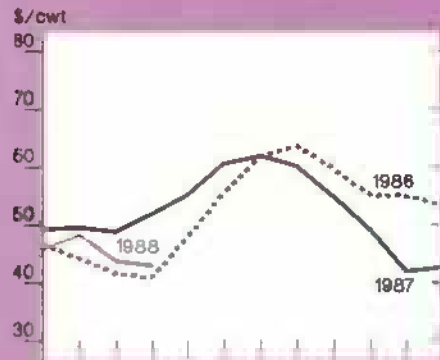
Eggs, New York<sup>2</sup>



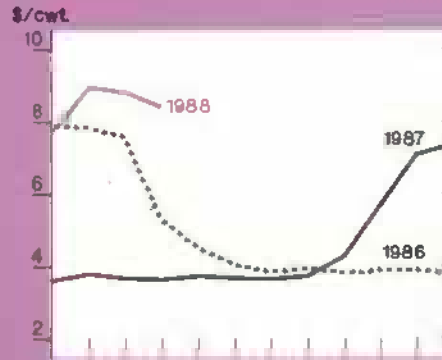
Soybeans, Chicago<sup>4</sup>



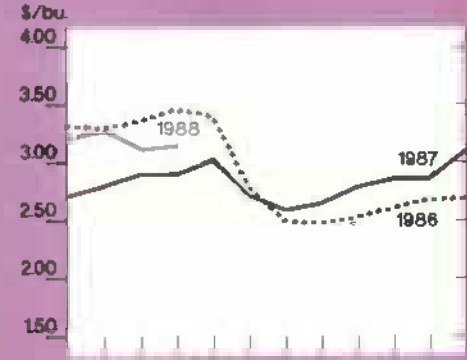
Barrows and gilts, 7 markets



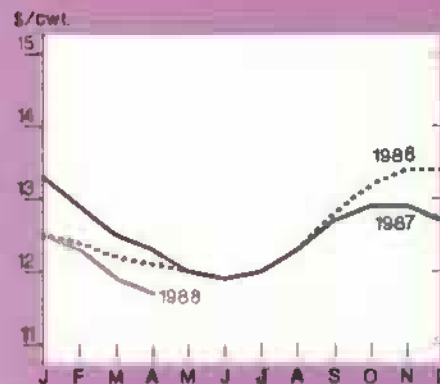
Rice (rough), SW Louisiana



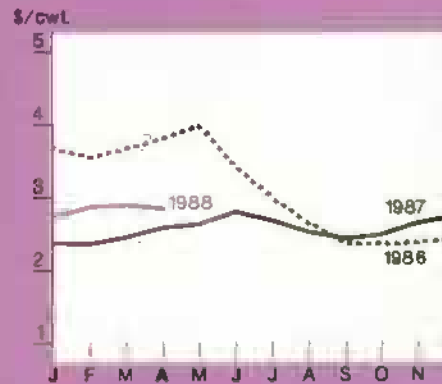
Wheat, Kansas City<sup>5</sup>



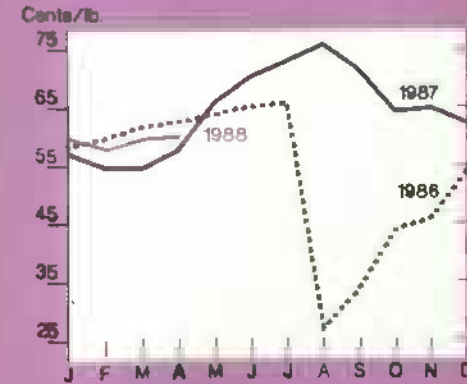
All milk



Sorghum, Kansas City



Cotton, average spot market



<sup>1</sup>500-700 lbs., medium no. 2. <sup>2</sup>Grade A Large

<sup>3</sup>No. 1 yellow. <sup>4</sup>No. 2 yellow. <sup>5</sup>No. 1 HRW.



## Generic Certificate Update

As of March 31, 1988, about \$17.9 billion of certificates had been issued since April 1986. Total certificate exchanges as of April 26 approached \$15.7 billion, placing near-term availability at \$2.1 billion. Future issuances could bring certificate availability for the rest of fiscal 1988 to \$5.7 billion.

Certificate exchanges continued heavy in April. From March 22 to April 26, USDA reported over \$1.1 billion of certificates exchanged for CCC inventory and producer loans. Of these, approximately 21 percent were exchanged for wheat and 74 percent for corn.

If this pace continues, exchanges for March-May could approach the \$3.5-billion total of a year earlier.

Of the certificates exchanged for wheat, 86 percent were exchanged for CCC-owned stocks, primarily through CCC wheat auctions. From November 6, 1987, through April 22, 1988, 381.4 million bushels of wheat were exchanged through the competitive bidding process. This reflects \$1 billion of certificates and an average bid price of \$2.65 a bushel.

Corn exchanges continue heavy. As of April 27, 1.6 billion bushels of 1987 crop corn remained under loan. With corn prices above loan repayment levels in many parts of the United States, producers may find that redeeming loans with certificates has no advantage over cash redemptions.

Nonetheless, depending on the value of local posted county prices, producers may find opportunities to redeem loans with certificates at prices less than loan repayment levels. Also, declining premiums make it less likely that producers will sell their certificates if they have crop under loan that can be redeemed.

### Certificate Premiums Continue To Fall

Since March 1988, premiums on generic certificates have averaged only 1.4 percent above face value, and offers for certificates have even been at a slight discount at many grain elevators. In May, certificates are scheduled to be sent out to wheat, feed grain, upland cotton, and rice producers as advance deficiency payments. What are the best marketing strategies for holders of these certificates?

Original holders are allowed to: (1) exchange certificates for crops held under loan or owned by the CCC; (2) sell the certificates to second buyers; or (3) if they are producers, redeem their certificates for cash.

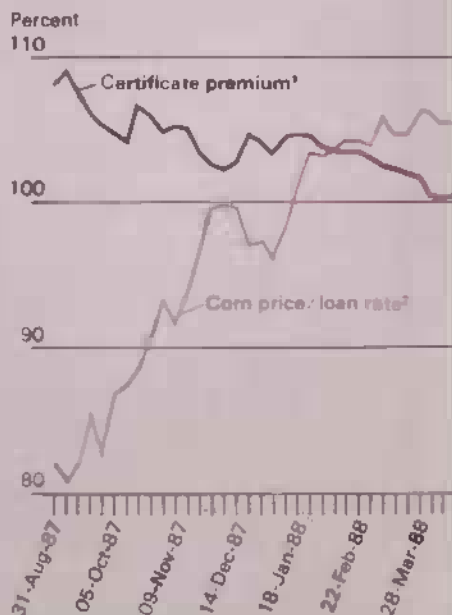
Certificates are valid for redemption for commodities until the last day of the eighth month after the month of issuance. They are redeemable for cash (by first handlers only) at their full face value beginning on the first day of the sixth month following the month of issuance.

For example, producers issued certificates for advance deficiency payments in May would have until January 31 to redeem their certificates for commodities. From November 1 to January 31, they could redeem certificates for cash at the full face value. After the expiration date, the certificates are redeemable at 85 percent of face value for 6 months, and at 50 percent of face value during the subsequent 12 months. After these 18 months have passed, certificates have no redemption value.

### Holder Must Consider Opportunity Cost

Cash redemption provides a floor on certificate prices. However, the floor is not

## Certificate Premiums Fall as Corn Prices Rise Above Loan Rate



<sup>1</sup>Certificate value as a percent of par value.

<sup>2</sup>Corn price as a percent of loan rate.

100 percent of face value; rather, it reflects the opportunity cost of holding a certificate for 5 months prior to cash redemption.

For example, at an interest rate of 8 percent, a newly issued certificate with a face value of \$1,000 has a cash redemption value of only \$968 (\$1,000 divided by  $1 + .08 \times 5/12$ )—that is, the amount a producer could deposit in an interest bearing account to be worth \$1,000 after 5 months.

Thus, a producer would be willing to sell a certificate to a second buyer if he could receive a price above 97 percent of face value. An increase in the interest rate to 9 percent decreases the effective cash-redemption value of the certificate to \$964.

Certificate holders may choose to hold certificates for redemption later in the fall if a rise in premiums is expected. For example, if certificates were expected to rise to 105 percent of face value in October 1988 and the interest rate were 8 percent, newly issued certificates would be currently worth at least 101.6 percent of face value (105 divided by  $1 + .08 \times 5/12$ ). In this case, if certificate prices were below 101.6 percent of face value, producers would be better off holding certificates until fall. [Joe Glauber (202) 786-1840]

Cumulative Generic Certificate Exchanges  
as of April 26, 1988

Commodity	CCC Inv	1/ Prod loans	Total
<b>Food grains</b>			
Wheat			
Vol. (mil bu.)	709.2	548.0	1,257.3
Value (mil \$)	1,804.1	1,398.1	3,198.2
Rice			
Vol. (mil cwt)	42.2	0.3	42.5
Value (mil \$)	153.0	1.3	158.1
<b>Feed grains</b>			
Corn			
Vol. (mil bu.)	599.6	6,078.1	6,677.8
Value (mil \$)	1,006.5	10,202.2	11,208.7
Grain sorghum			
Vol. (mil bu.)	99.2	417.5	516.7
Value (mil \$)	162.0	681.0	843.8
Barley			
Vol. (mil bu.)	71.3	114.1	185.4
Value (mil \$)	100.4	160.6	261.0
Cotton			
Vol. (mil bales)	.89	5.96	6.85
Rye, oats, soybeans			
Value (mil \$)	13.1	31.4	44.5
<b>Total Value</b>			
(mil \$) 2/	3,239.9	12,471.4	15,711.3

1/ CCC loans as of April 22, 1988.

2/ Does not include values for cotton exchanges.

Source: Agricultural Stabilization and Conservation Service, USDA



somewhat from last year's near-record. Last year, Soviet barley area expanded as wheat acreage hit by bad weather was replanted with barley.

Despite the recovery of Thailand's corn production, U.S. competitors' coarse grain output in aggregate is expected to show little change from 1987/88. The main reason is a projected drop in Canada's coarse grain production. Growers there are expected to shift barley area to rapeseed because of favorable prices.

Largely because of the recovery in Thai supplies, competitor coarse grain exports are forecast to rise 7 percent. U.S. exports are expected to total 52.5 million tons (October/September year), virtually the same as estimated for 1987/88.

U.S. corn exports are projected to increase by 50 million bushels from 1987/88's 1.7 billion. Barley and sorghum sales may drop off.

Although earlier planting intentions indicated that U.S. feed grain planted area may fall by about 2 percent in 1988/89, anticipated higher yields could push output up 2 percent to about 219 million tons in the United States. With corn prices increasing from recent lows because of relatively small free stocks in 1987/88, corn area is likely to increase this year. This gain will probably come at the expense of some other feed grains.

All domestic use categories for feed grains are forecast to show relatively modest growth in 1988/89. Feed, food, seed, and industrial uses are forecast to expand by 2.5 million tons total, to reach almost 189 million for the year.

Feed grain ending stocks, which are forecast to fall significantly in 1987/88, are likely to decline this year by more than 20 million tons. Feed grain ending stocks for 1988/89 are forecast to slip to under 110 million tons, less than 60 percent of domestic use.

Corn production is forecast to reach about 7.3 billion bushels, up about 2.5 percent from 1987. Weather conditions to date are favorable through much of the Midwest. Two key economic factors—attractive corn prices, and a modest change in the paid land diversion requirements—boosted planting intentions above 1987/88 by almost 2 percent.

Planting intentions indicate almost 67 million acres of corn in 1988/89.

Corn inventory during 1987/88 is forecast to fall by 770 million bushels and on balance is responsible for the projected drop of a half-billion bushels in 1988/89 corn supply.

The modest decline in wheat and other grain feeding is expected to be more than made up by increases in corn fed. Corn feed use in 1988/89 could for the first time reach 5 billion bushels, an increase of 2 percent over the previous year. Other domestic uses are forecast to remain at or near 1987/88. Anticipated export gains, however, will bring total uses to over 8 billion bushels, more than 2 percent above 1987/88.

Corn use, therefore, is forecast to exceed production by about 725 million bushels, drawing down stocks to the lowest since 1984/85. The corn stocks-to-use ratio for 1988/89 likely will fall from about 52 percent to around 42—the lowest since 1984/85.

#### ***Cotton Ending Stocks To Increase***

A larger world cotton harvest is expected in 1988/89. More foreign area and higher yields are both likely to contribute to this increase. With world consumption showing little change, ending stocks will rise by about 1 million bales, the first increase since 1985/86.

World cotton trade likely will drop again. It is forecast at 23 million bales, 12 percent below the peak of 26.1 million in 1986/87 but still 5 percent above the 1983-87 average. This drop, together with larger competitor production, is expected to mean a further drop in U.S. exports, to 6 million bales.

Relaxed program requirements for cotton probably have boosted planted acres for 1988/89. Cotton prices are higher than they were 3-4 years ago, but prospects are not favorable for still stronger prices in 1988/89 because production will outpace likely consumption.

Nonetheless, some acreage expansion is anticipated in the United States. Planting intentions indicate 11.8 million acres, up more than 10 percent. The attraction of high soybean prices has held back a possible shift of soybean area into cotton.

Otherwise, the cotton area would be even higher.

Cotton yields are not likely to match the record 706 pounds per acre set in 1987/88, but they are expected to be high. Production is forecast at 14.0 million 480-pound bales, down 5 percent from 1987/88 but above the average of the last 5 years.

Domestic cotton supplies have increased steadily over the last several years, but they are forecast to decline slightly in 1988/89. Inventories expanded during 1987/88 by about 10 percent, and with reduced domestic and export use, may show a similar increase for 1988/89. Stocks in excess of 6 million bales are likely.

Domestic use next season is forecast below the last 2 years. This, coupled with lower U.S. exports, results in a forecast drop of 1 million bales from 1987/88 in total use.

#### ***Oilseed Production Will Expand Again***

World oilseed output in 1988/89 is expected to total 208 million tons, up 4 million from 1987/88. Foreign output is expected to follow the upward trend that has seen output rise by two-thirds over the last decade.

For 1987/88, prospects for Brazil's crop have decreased somewhat because of poor weather as harvest nears. Partly because of the smaller-than-expected Brazilian crop, U.S. sales of soybeans have continued strong despite higher prices. U.S. exports in 1987/88 (Sept.-Aug.) are now expected to reach nearly 22 million tons, the largest export volume since 1982/83.

The prospects of higher soybean prices in 1988/89 have been brought on largely by falling global inventories in recent years. Price prospects led to a 1-percent increase in planting intentions in the United States, reversing declines of the last several seasons. Price gains since March may further expand soybean area. Based on planting intentions, area is likely to be about 9 million acres below 1984/85.

Bean production is forecast at 1.9 billion bushels, about the level of the previous year. But with smaller beginning stocks,

total supplies likely will be under 2.2 billion bushels, down more than 8 percent from 1987/88.

With small declines seen in crush, seed, or feed use, total domestic soybean use for 1988/89 is expected to match that of the previous year, at about 1,250 million bushels. Exports for 1988/89 are forecast at 760 million, about 40 million bushels below a year earlier. Total use, at over 2 billion bushels, is forecast down about 50 million bushels from 1987/88.

With utilization continuing above production, soybean stocks are forecast to fall dramatically in 1988/89, as they have for the last 2 years. Stocks are forecast at about 7 percent of total consumption, compared with over 28 percent in 1985/86. (James Cole (202) 786-1840 and Frederic Surls (202) 786-1824)

**For further information, contact:**  
Sara Schwartz, world food grains;  
Edward Allen, domestic wheat; Janet Livezey, rice; Peter Riley, world feed grains; James Cole, domestic feed grains; Tom Bickerton, world oilseeds; Roger Hoskin, domestic oilseeds; Carolyn Whitton, world cotton; Bob Skinner, domestic cotton; Jim Schaub, peanuts. World information, (202) 786-1820; domestic, (202) 786-1840.

## HIGH-VALUE CROP OVERVIEW

### *Big Year for Strawberries*

Sharply larger carryover stocks of frozen strawberries and an abundant fresh crop portend a good year for shortcake lovers. Slightly larger strawberry acreage in California and Florida, combined with higher yields, likely will raise 1988 U.S. fresh production to a new record.

The California crop may reach a record 850 million pounds, up 3 percent from a year ago and nearly 8 percent higher than in 1986. California accounted for 77 percent of U.S. production and 79 percent of fresh supplies in 1987. Dry weather in California has helped raise strawberry yields this season. Florida's winter strawberry production rose 22 percent above last year because of higher yields and slightly more acreage.

Strawberry producers in California and Florida expanded acreage this year in

response to good prices for the 1987 crop. Most other States reported slightly lower acreage.

Because of the larger crop, fresh strawberry prices probably will average lower than last season. California's shipments were running well ahead of last year at the end of April.

Strawberry imports from Mexico are far behind last year's pace—20.6 million pounds through April 17, compared with 53.8 million a year earlier. However, total supplies of frozen strawberries exceed last year because of larger cold storage holdings. April 1 holdings stood at 160 million pounds, 60 percent more than a year before.

### *Fresh Vegetable Area Rises*

Vegetable farmers this spring will harvest about 4 percent more acreage of the seven major fresh market vegetables. Celery, sweet corn, lettuce, and tomato acreage will rise about 10 percent each, while carrot acreage will rise only marginally. Broccoli and cauliflower growers cut area by 3 and 18 percent, respectively, because of weak prices last spring.

Farmers indicate plans to cut dry bean acreage 23 percent from 1987. The lowest dry bean prices in 5 years, plus stronger prices for alternative crops such as soybeans and wheat, contributed to the planned acreage reduction. The 1988 acreage may be the smallest since 1983, when dry bean prices sagged because of large stocks and declining exports. Lower production this fall, together with expected larger exports during the spring and summer, should firm up bean prices in the months ahead.

Potato stocks, swollen from last year's large crop, continue to put downward pressure on prices. Potato prices in early May stood about one-third below a year earlier and may remain relatively low until more exact indications of fall potato acreage are received this summer.

The U.S. trade deficit in vegetables narrowed to 0.6 billion pounds for the first 2 months of 1988, compared with 0.8 billion for the same period a year earlier.

Exports of all vegetables exceeded year-earlier levels by 58 percent, while exports of fresh vegetables rose 139

percent. The majority of the fresh exports are shipped to Canada, where the relatively inexpensive U.S. dollar makes U.S. products more competitive.

Frozen vegetable exports rose 37 percent above the first two months of 1987. Frozen french fry potato sales to Japan make up the lion's share of frozen exports. Vegetable imports, mostly fresh items from Mexico, rose 5 percent to 1.2 billion pounds.

### *East Coast Sugar Prices Strong*

Raw sugar traded at about 22.2 cents a pound in New York (Contract No. 14, nearby futures) during April, up from 21.7 cents for the last quarter of 1987 and above the 1987/88 market stabilization price of 21.76 cents.

The current price strength stems primarily from lowered U.S. import quotas, which have helped tighten supplies of raw cane sugar in the Eastern United States.

Uncertainty about delivery of imported cane sugar, caused by political unrest in Panama, may also have fueled higher prices. Thirty-five percent of the 1988 U.S. sugar quota is allocated to countries which normally ship through the Canal.

In sharp contrast to the short supplies in the Eastern market, the Central and Western parts of the United States are experiencing large supplies because of record beet sugar output. Consequently, the price differential between beet sugar in the Chicago market and refined cane sugar in the Northeast has widened from its usual 2.0 cents a pound to 3.5-4.5 cents, causing more beet sugar to move east.

U.S. sugar production this season may fall somewhat short of last year's record 7.3 million tons, raw value, because of lower sugarbeet yields. Sugarbeet producers indicated during March that they will plant 1.6 percent more area in 1988 than the 1.27 million acres grown last season.

Attractive prices for sugarbeets and sugarcane in 1987 relative to alternative crops continue to make growers bullish. However, yields are unlikely to match the unusually high levels achieved last year, and beet sugar production likely



will fall about 100,000 tons from last year's 3.96 million.

Analysts look for sugarcane acreage to expand marginally and, if growing conditions are near normal, for production at least to equal 1987/88's 3.37 million tons.

### **Strong Demand Reduces Tobacco Stocks**

Substitution of domestic for imported tobacco, rising cigarette production, and tobacco production that is up but still below pre-1986 levels, are shrinking U.S. tobacco stocks and resulting in smaller total supplies.

Despite a larger crop in 1987, smaller carryover stocks caused the 1987/88 domestic leaf supply to fall 8 percent below the previous year. Further stock declines likely will reduce total supply again in 1988/89. Off-farm stocks of domestic tobacco on January 1, 1988, stood 11 percent lower than a year earlier.

Demand for tobacco in cigarette manufacturing has been strong because of strong export demand. Although U.S. smokers are consuming fewer cigarettes, U.S. manufacturers are producing more and exporting them. Cigarette exports rose from 64 billion in 1986 to 100 billion in 1987.

Domestic cigarette consumption will continue its decline this year because of further price hikes, continued antismoking activity, and increased restrictions on where people may smoke. However, exports are expected to rise again, sustaining the growth in total production.  
[Glenn Zepp (202) 786-1882]

**For further information, contact:**  
Ben Huang, fruit; Shannon Hamm, vegetables; Peter Buzzanell, sweeteners; Verner Grise, tobacco. All are at (202) 786-1886.



## **Commodity Spotlights**

### **Why Aren't Corn Farmers Moving to Soybeans?**

The March *Prospective Plantings* report indicates a 1-percent increase in U.S. soybean acreage over 1987/88, from 57.4 to 58.0 million acres. However, in the Corn Belt (Illinois, Indiana, Iowa, Minnesota, Missouri, Nebraska, and Ohio), farmers indicate plans to reduce soybean acreage around 0.5 percent, from 36.8 million acres in 1987 to 36.6 million. The Corn Belt typically accounts for 65 percent of soybean acres planted and 70 percent of production.

Last year's U.S. soybean acreage was the lowest since 1976. Area remains low this year, despite a 37-percent increase from last year in the price of the November futures contract for soybeans. In March, November futures prices averaged \$6.54 a bushel, compared with a \$4.78 average for November 1987 futures in March 1986.

Despite a rise in the soybean-corn futures price ratio—from 2.75 in March 1987 to almost 3 in 1988—corn area in the Corn Belt is expected to rise from 41.8 million acres to 43.5 million, while soybean acreage is little changed.

If futures prices favor soybeans over corn, why are farmers not planting more

soybeans and less corn? Farmers are not responding to the soybean-corn market price ratio.

### **Growing Share of Corn Revenues Comes From Government Payments**

One reason the ratio has become a poor indicator of planting intentions is that during much of the 1980's an increasing share of corn producers' revenues has come from Government program payments. Under current legislation, expected corn revenues include deficiency payments, but expected soybean returns do not. Both crops earn returns from being marketed or placed under loan.

Farmers also consider the cost of leaving the corn program—loss of corn acreage base. Under current legislation, if a producer plants less corn and more soybeans, he relinquishes a portion of the corn base on which future benefits are calculated.

For example, assume a producer has maintained a corn base of 100 acres during the past 5 years, but this year decides to plant the 100 acres in soybeans. As a result, the corn acreage base for 1989 will be only 80 acres:  $(100+100+100+100+0)/5$ . The following year, the base will decline to 76 acres:  $(100+100+100+0+80)/5$ . The base will drop as low as 58 acres and eventually stabilize at 67.

The only way the producer could regain the 100-acre corn base would be to plant enough corn to bring the 5-year average back to 100. This would mean overplanting the base and disqualifying from the corn program for that year.

How high must the soybean price rise to induce corn producers to give up corn base to plant soybeans? A hypothetical example can be used to answer the question. Consider a 5-year planning horizon of a farmer with a corn acreage base of 100 acres.

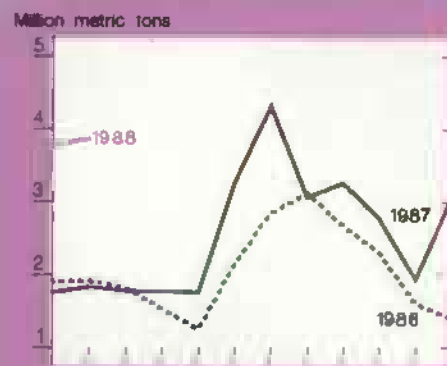
Since specific program provisions for the 1989-92 crops are not yet known, assume that target prices and loan rates are reduced the maximum allowed under the 1985 Food Security Act. Acreage reduction requirements will be 20 percent and the farm price for corn is assumed to average \$1.60 during 1989-92.

# U.S. Agricultural Trade Indicators

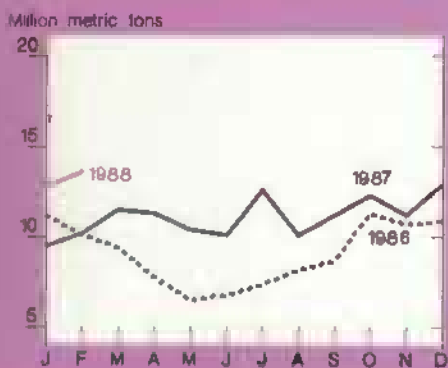
U.S. agricultural trade balance



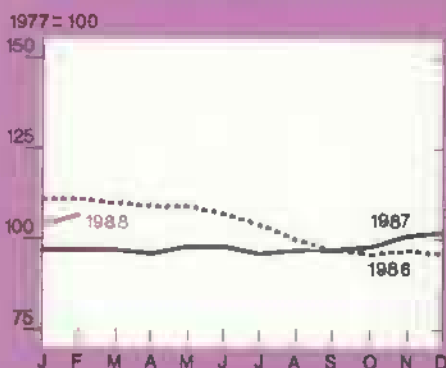
U.S. wheat exports



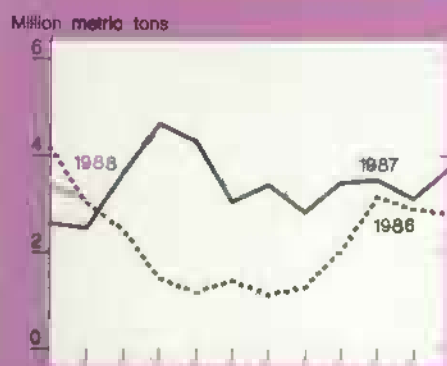
Export volume



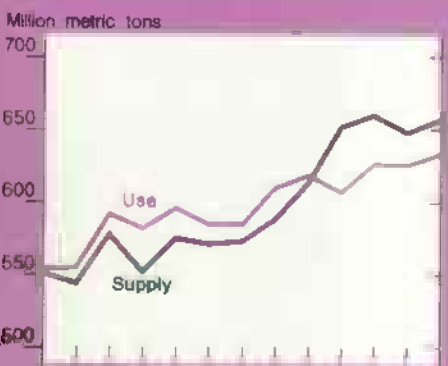
Index of export prices



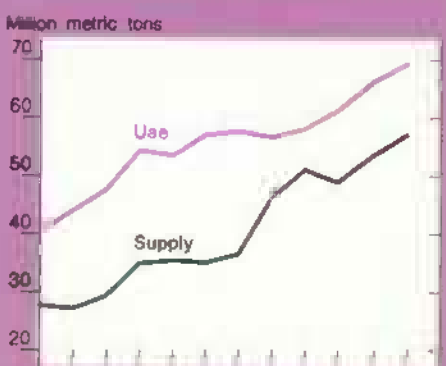
U.S. corn exports



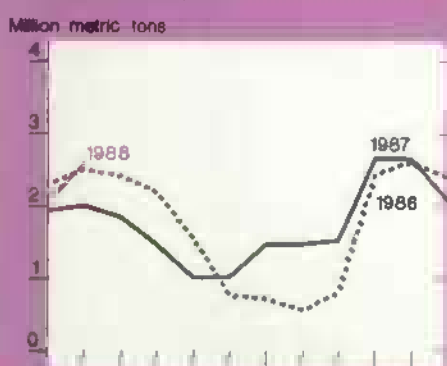
Foreign supply & use of coarse grains



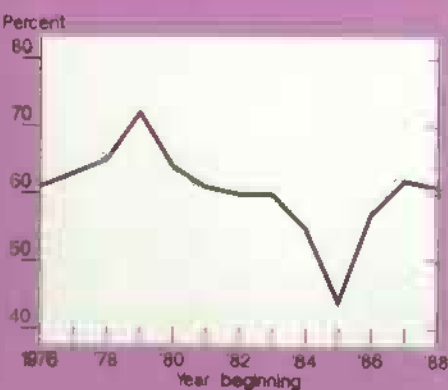
Foreign supply & use of soybeans



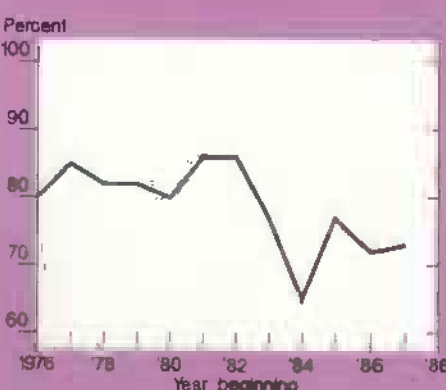
U.S. soybean exports



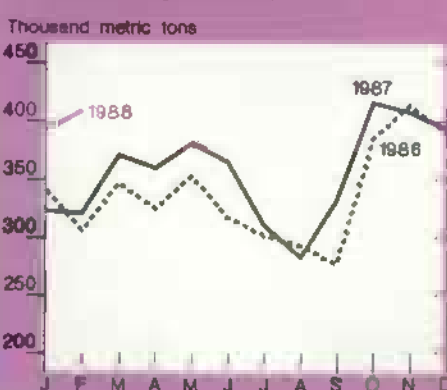
U.S. share of world coarse grains exports<sup>1,2</sup>



U.S. share of world soybean exports



U.S. fruit & vegetable exports<sup>3</sup>



<sup>1</sup>Excluding intra-EC trade

<sup>2</sup>October-September years

<sup>3</sup>Includes fruit juices



### Budgeted Returns From Planting Corn 1/

Variable	1988	1989	1990	1991	1992
---Acres---					
Base acreage	100	100	100	100	100
Acreage reduction (%)	20	20	20	20	20
Acres planted	80	80	80	80	80
---Bu./acre---					
Program yield	120	120	120	120	120
Actual yield	132	132	132	132	132
---Bushels---					
Production on planted acres	10,560	10,560	10,560	10,560	10,560
Eligible for deficiency pymts	9,600	9,600	9,600	9,600	9,600
---\$/bu.---					
Target price 2/	2.93	2.84	2.75	2.66	2.57
Loan rate 2/	1.77	1.65	1.57	1.49	1.42
Farm Price	1.83	1.60	1.60	1.60	1.60
Deficiency payment	1.10	1.19	1.15	1.06	0.97
---\$---					
Gross returns					
Loan/market	19,325	17,424	16,896	16,896	16,896
Deficiency	10,560	11,424	11,040	10,176	9,312
Total	29,885	28,848	27,936	27,072	26,208
Per-acre cost of production (cash expenses)	190	190	190	190	190
Cost of production	15,200	15,200	15,200	15,200	15,200
Net return	14,685	13,648	12,736	11,872	11,008

1/ Present value of net returns: \$55,756. 2/ Assumed.

### Budgeted Returns From Planting Soybeans 1/

Variable	1988	1989	1990	1991	1992
---Acres---					
Acres planted	100	100	100	100	100
---Bu./acre---					
Actual yield	40	40	40	40	40
---Bushels---					
Production on planted acres	4,000	4,000	4,000	4,000	4,000
---\$/bu.---					
Loan rate 2/	4.53	4.50	4.50	4.50	4.50
Farm price	6.23	6.23	6.23	6.23	6.23
---\$---					
Gross returns	24,920	24,920	24,920	24,920	24,920
Per-acre cost of production (cash expenses)	120	120	120	120	120
Cost of production	12,000	12,000	12,000	12,000	12,000
Net return	12,920	12,920	12,920	12,920	12,920

1/ Present value of net returns: \$55,756. 2/ Assumed.

Assume costs of production the same as corn producers faced in the Corn Belt during 1986 (reported by the Farm Costs and Returns Survey). Total gross and net returns for 1988 through 1992 are expressed on a present value basis assuming an annual interest rate of 8 percent.

### Corn Program Base: Worth Over \$500 an Acre

Under these assumptions, participation in the corn program is worth approximately \$55,750 over 5 years per 100 acres of base. Assuming soybean yields of 40 bushels and production costs of \$120 per acre, the cash price for soybeans would have to equal \$6.23 per bushel over each of the 5 years for a producer to get the same net return as from planting corn. The mid-May price for November soybean futures was slightly above this price.

Further analysis demonstrates that the breakeven price for soybeans is somewhat insensitive to the price of corn. For example, if corn were expected to average \$1.70 a bushel in each of the years 1989-92, the breakeven price of soybeans would rise by only 2 cents a bushel. At \$1.80 a bushel for corn, a soybean price of \$6.27 a bushel would be necessary to coax corn producers to give up their base.

Using trend yields over the 5-year period increases the relative advantage of corn over soybeans. If soybean yields are assumed to increase by 0.5 bushels a year and corn yields by 3.2 bushels, a breakeven price of \$6.28 is needed for soybeans, assuming \$1.60-a-bushel corn.

The breakeven price is more sensitive to the level of target prices, program yields, and acreage reduction requirements for the corn program. Since producers may be uncertain about soybean prices over the next 5 years, they would likely stay with the more certain return under the corn program.

### Regaining a Relinquished Corn Base Could Be Costly

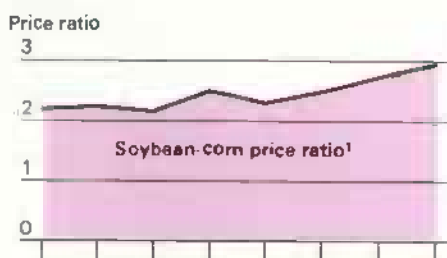
How high would the soybean price have to rise before producers would consider switching to soybeans for 1988 only? To answer this question, assume that a producer plants 100 acres to soybeans in 1988 and then returns to corn over the

following 4 years. In order to regain his 100-acre corn base, it is assumed he would plant 200 acres to corn in 1989, thus becoming ineligible for corn program payments that year.

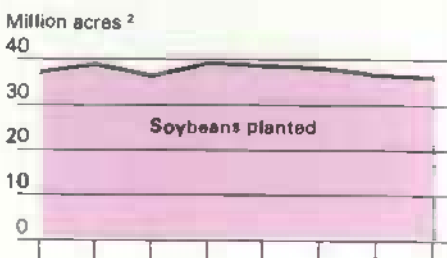
At a corn price of \$1.60 a bushel for 1989-92, soybeans would have to exceed \$9.34 a bushel in 1988 for producers to plant soybeans instead of corn that year. This implies a soybean-corn futures price ratio of over 4.25. If the corn price were to average \$1.70 a bushel over 1989-92, the breakeven price on soybeans would fall to \$9.05 a bushel. At a corn price of \$1.80, the breakeven price would fall to \$8.76.

Corn Belt producers have been desensitized to the soybean-corn price ratio because the corn program provides per-acre net returns that compare favorably with

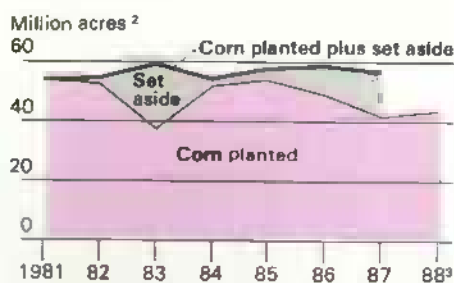
#### Recent Rise in the Soybean-Corn Price Ratio...



#### ...Has Not Resulted in More Soybeans...



#### ...or Less Corn



<sup>1</sup>For soybeans, March average of daily closing quotes for Nov. futures; for corn, March average of daily closing quotes for Dec. futures.

<sup>2</sup>Corn Belt acreage, includes Ill., Ind., Iowa, Minn., Mo., and Ohio.

<sup>3</sup>1988 planting intentions.

those of soybeans and are less affected by market price variability. Furthermore, the cost of leaving the corn program, even for a year, can be quite high if the producer wants to maintain a corn acreage base over the long run.

While the soybean-corn price ratio may have little effect on soybean acreage in the United States, foreign producers may be responding by planting more soybeans instead of corn. This seems particularly true in countries such as Argentina, which increased area planted to soybeans by 20 percent this year (from 3.51 million hectares in 1986/87 to 4.2 million in 1987/88).

Ironically, increased oilseed production abroad makes it all the more unlikely that soybean prices will rise to the levels necessary to encourage Corn Belt farmers to plant soybeans and give up their corn base. [Joe Glauber (202) 786-1840]

#### New Industry Fishes for Acceptance

Consumer demand for fish and seafood, and continued world population growth, are pressuring nations to harvest previously underutilized species and to develop alternative sources of marine products. Many commercial fisheries, which harvest from the wild, are approaching their maximum sustainable yield. Thus aquaculture—growing fish or other aquatic life in a controlled environment—is expanding.

Global aquacultural production was about 22 billion pounds a year in 1986. Over 93 species of finfish, 7 species of shrimp or prawns, 6 species of crawfish, as well as several species of bivalve mollusks and a wide variety of aquatic plants, are currently cultured worldwide.

In 1980, aquaculture accounted for 13 percent of worldwide production of aquatic foods and goods, up from 7 percent in 1970. Industry sources indicate that by 2010, aquaculture will account for 25 percent of the worldwide aquatic harvest.

Fish and shellfish, already the mainstay of many foreign diets, are increasingly important in American diets. In 1981, U.S. fish consumption hit 2.96 billion pounds (a 30-percent increase over 1970); 47 percent of this was imported.

Population growth accounts for only half the increase. Per capita U.S. consumption of fish and shellfish has grown, reaching a record 15.4 pounds (edible weight) in 1987. It is expected to expand another 50 percent by 2010.

The 1987 consumption figure includes domestic and imported fishery products. It includes only a small portion (0.5 pounds) of the estimated 3 to 5 pounds per capita of aquacultural production. Also excluded from the published series is consumption from recreational fishing (3-4 pounds per capita). Including these two sources, U.S. per capita consumption is probably between 20 and 24 pounds a year. Despite recent increases, this level is well behind Europe (40-45 pounds per capita) and Japan (130-140 pounds).

In 1970, the United States imported about \$1 billion of fish products, and exported just over \$0.3 billion. By 1986, imports were \$7.6 billion and exports \$1.4 billion.

#### U.S. Aquaculture Production Growing Rapidly

Aquaculture production of fish and shellfish in the United States increased from about 205 million pounds in 1975 to over 600 million in 1986. It is forecast to pass 2 billion by 2010, according to industry sources. This includes production moving through normal marketing channels—processing, wholesale, and retail—but excludes production for catch-out ponds and direct sales from producer to consumer.

In the United States, almost 90 percent of aquacultural production is concentrated in four major species—catfish, crawfish, salmon, and trout.

The U.S. aquaculture industry has the potential to (1) provide an increased and more reliable supply of fishery products than is currently coming from wild stocks, (2) reduce the trade deficit for fishery products, (3) develop new markets for domestic grain products, and (4) provide additional farm and nonfarm jobs and increased revenue.

#### Aquaculture Growth Benefits Rural Areas

The growth in aquaculture occurred at a time when the general agricultural

# U.S. Private Aquaculture Production for 1980-86 1/

Species	Production 2/					Value				
	1980	1983	1984	1985	1986	1980	1983	1984	1985	1986
	1,000 pounds					\$1,000				
Baitfish 3/	22,046	22,046	23,598	24,807	25,247	44,000	44,000	47,045	51,280	51,522
Catfish	76,842	220,000	239,800	271,357	326,979	53,572	132,000	191,840	189,194	228,886
Clams	561	1,689	1,689	1,588	2,506	2,295	9,500	4,178	4,717	8,307
Crawfish	23,917	60,000	59,400	64,999	97,500	12,951	30,000	29,700	32,500	48,750
Freshwater										
Prawns	300	275	317	267	178	1,200	1,500	1,698	1,540	893
Mussels	NA	775	917	928	1,206	NA	1,500	1,584	1,248	1,725
Oysters	23,755	23,300	24,549	22,473	24,090	37,085	31,500	38,970	39,977	42,797
Pacific										
salmon	7,616	20,600	45,086	84,305	74,398	3,400	6,800	17,252	25,439	32,751
Shrimp	--	255	528	440	1,354	--	874	1,566	1,687	3,408
Trout	48,141	48,400	49,840	50,600	51,000	37,474	50,000	54,435	55,154	58,590
Other										
species	NA	7,000	9,900	14,000	15,500	NA	7,000	9,900	20,000	21,700
<b>Totals</b>	<b>203,178</b>	<b>404,340</b>	<b>455,733</b>	<b>535,764</b>	<b>619,959</b>	<b>191,977</b>	<b>314,674</b>	<b>398,168</b>	<b>422,736</b>	<b>496,329</b>

1/ Some data were not used so that the confidentiality of the person or business submitting the statistics could be protected. This is the case where data cannot be aggregated. 2/ Data shown are live weight except for oysters, clams, and mussels, which are meat weight. Excluded are eggs, fingerlings, etc., which are an intermediate product level. 3/ Not used for food consumption. NA = not available.

economy was depressed. For every 10 million additional pounds of catfish raised, 220 new jobs are created in the industry and 1,100 jobs are created in related urban and rural industries, according to a study in Mississippi.

Although the production of a single species may be concentrated in one area, aquacultural production is practiced in every State and territory. Most catfish are raised in Mississippi, Alabama, and Arkansas, while salmon production is mainly in Washington and Oregon, crawfish in Louisiana and Texas, and trout in Idaho.

Aquaculture competes with livestock for domestic feed crops. Channel catfish eat mostly soybean products and corn. Catfish have a feed conversion ratio of roughly 2 to 1: to get a pound of catfish requires one pound of soybean meal, a half-pound of corn meal, and a half-pound of other nutrients.

Likewise, nearly 55 percent of the ingredients in the usual diet for salmon are byproducts of farm commodities (17 percent whey, 16.5 percent wheat germ, 15 percent cottonseed meal, and 6 percent soybean oil).

Aquaculture is suited to small as well as commercial farms. A modest aquacultural operation can provide significant income. Many agricultural institutions still

regard aquaculture as a sideline. Even so, aquaculture has become a technical and highly capitalized commercial enterprise.

Because of their limited information about aquacultural operations, many Federal agencies, such as the Farmers Home Administration and the Federal Crop Insurance Corporation, have been reticent in assisting aquacultural producers financially.

## Government Support For Aquaculture Increasing

While aquaculture has developed rapidly on its own so far, the rate and direction of its growth can be influenced by Government action. In 1980, Congress passed the National Aquaculture Act, which has as its purpose the promotion of aquaculture in the United States by (1) declaring a national aquaculture policy; (2) establishing and implementing a national aquaculture development plan; and (3) encouraging aquacultural activities and programs in both the public and private sectors of the economy.

A national Aquaculture Development Plan was submitted to Congress in September 1983 by the Joint Subcommittee on Aquaculture, and it has been used by several States in developing their own plans. However, Congress has made no formal response to the plan, and it has not yet been implemented.

Many agencies within USDA have allocated resources to aquaculture, but there has been little emphasis on the enterprise. While funding for aquaculture within USDA has risen to \$20 million in 1988, the lack of emphasis on the sector has limited the use of USDA's research and support network. Several other Government agencies also devote resources to aquaculture regulation, research, and technical assistance.

Many private and public academic institutions, including both sea-grant and land-grant universities, are involved in research and extension on regional issues of importance to aquaculture. Marketing and processing cooperatives serve a special function in the development and expansion of aquaculture on a regional level. Among the problems to be addressed are the following:

- large quantities of clean water are needed for aquacultural operations;
- birds eat fish from stocked ponds;
- there are few medicines specifically for fish;
- problems exist in establishing national markets for species that had previously been produced and consumed chiefly on a regional basis.

[Mike Dicks and Dave Harvey 786-1885]





## General Economy

### OUTLOOK STRONG FOR REST OF 1988

If the maxim "a rising tide lifts all boats" can be applied to the economy, agriculture is likely to be lifted by the rising tide of general economic developments over the next several months. Despite the recent record stock-market decline and related recession fears, the general economy is growing at a rate more normally associated with the early part of a business expansion than one in its 68th month.

For agriculture, the general economy through the rest of 1988 likely holds:

- increased domestic demand because of higher employment and higher wages;
- upward pressure on interest rates from slight increases in inflation and a faster growing economy; and
- upward pressure on wages and non-farm-origin input prices, also from a faster growing economy.

#### *Exports and Business Investment Spark Economy*

Real GNP grew at an annual 2.3-percent rate in the first quarter of 1988, led by robust consumer spending, continued

strength in exports, and vigorous business investment. These figures, combined with the strong 4.8-percent fourth-quarter rate, have dampened speculation that a recession will begin in 1988 or early 1989.

Exports continue to help the economy. Real exports grew at a 10-percent annual rate in the first quarter, continuing a 21-month rise. Real imports grew at a 5.2-percent rate, which is slower than 1987's 9.1 percent. It may still be several more months before improvement appears in the nominal merchandise trade balance; however, the underlying real net exports deficit has improved by about 20 percent since third-quarter 1986.

Stronger export growth and slower import growth can largely be attributed to the declining dollar. Since January 1987, the dollar has fallen 12.3 percent in trade-weighted terms, although it has been relatively stable in the last few months.

The falling dollar has driven up import prices. Non-petroleum merchandise import prices in the first quarter were 3.6 percent higher than in first-quarter 1987. While rising import prices tend to reduce import volume and improve the real trade deficit, the tradeoff may be increased inflation.

#### *Production and Employment Rise*

Vigorous export demand continued to spur industrial production, albeit at a slower pace than in 1987. In the first 4 months of 1988, production was 6.1 percent ahead of output in the first 4 months of 1987.

Capacity utilization was above 80 percent in the last 7 months of 1987. Utilization averaged 82.4 percent in the first quarter, compared with 82.1 percent in the fourth quarter and 80.7 percent for last year. Some industries, such as paper/cardboard, textiles, and chemicals, have reached 90-percent operating rate levels.

Along with rising production and higher utilization rates, the civilian unemployment rate declined to 5.4 percent in April, down 0.5 percentage points from the fourth-quarter average. Unemployment remains the lowest in 14 years.

Stronger employment boosted personal income in the first quarter; in nominal terms, it was 6.4 percent ahead of the first quarter of 1987, which compares with 6-percent growth in 1987. Disposable personal income, after adjustment for inflation, increased an annual 3.2 percent over the fourth quarter, compared with 1.2 percent in 1987, and much of this was responsible for the strong increase in personal consumption in the first quarter.

Despite post-crash fears of a consumer-spending halt, and a 2.5-percent spending decline in the fourth quarter, consumer spending rose at a robust 3.8-percent annual rate in the first quarter. Spending was led by a 12.7-percent increase in durable goods, rebounding from a 20.3-percent decline in the fourth quarter.

#### *Is Inflation Making A Resurgence?*

The strength in consumer spending suggests that consumer confidence in the economy remains high. However, the fear persists that a too-rapid spending pace, along with high capacity use and lower unemployment, will trigger inflation. The Consumer Price Index rose at a 2.4-percent annual rate in the first quarter of 1988, compared with a 3.6-percent rise for 1987. Sliding energy prices and offsetting monthly changes in food prices held the index down.

Because food and energy prices tend to be volatile, the CPI measures the underlying rate of inflation better when food and energy are withdrawn. This adjusted index rose 4.1 percent at an annual rate in the first quarter, equal to the rate for 1987.

Is high inflation returning? There are two schools of thought on the subject, each with support.

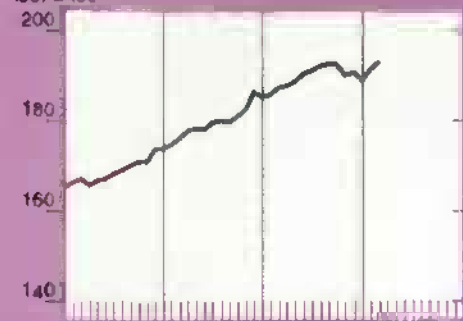
The first points to the export-led expansion and its continued upward pressure on production and capacity limits. Proponents of this view argue that strong demand coupled with tight supply will lead to production bottlenecks and will force prices of goods to rise. Some industries are showing signs of strain; in the paper and products industry, where capacity utilization averaged 95.2 percent over the 12 months ending in March, prices rose 9.5 percent.



# General Economic Indicators

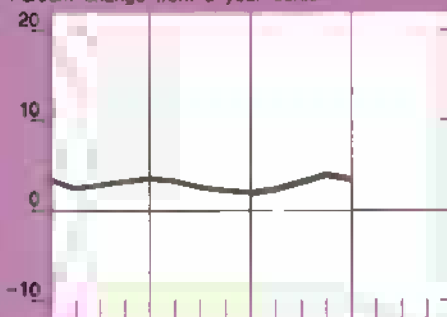
Composite leading economic indicators

1967 = 100



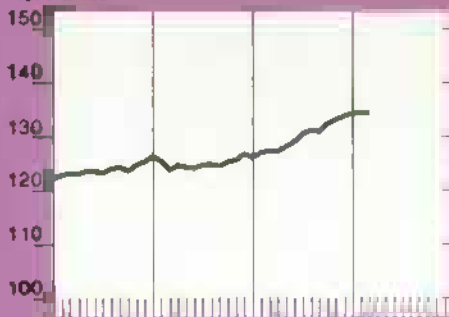
Gross national product<sup>1</sup>

Percent change from a year earlier



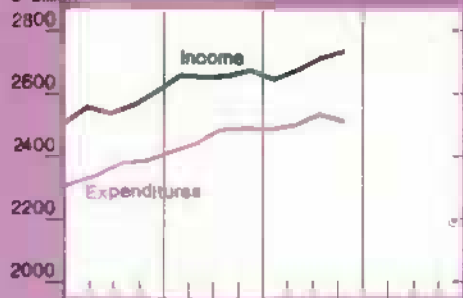
Industrial production

1977 = 100



Disposable income and consumption expenditures<sup>2</sup>

\$ billion



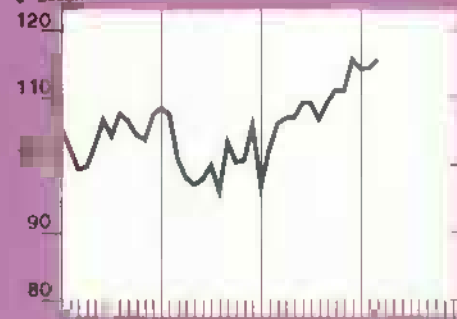
Nonresidential fixed investment<sup>2</sup>

\$ billion



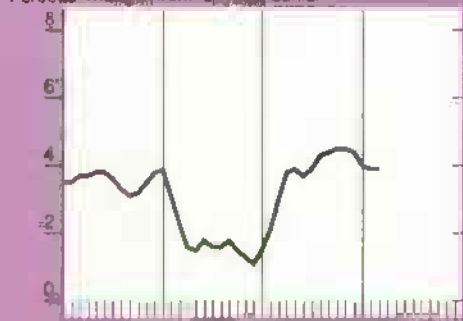
Manufacturers' durable goods orders<sup>3</sup>

\$ billion



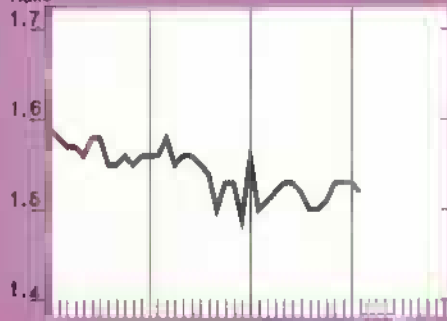
Consumer price index

Percent change from a year earlier



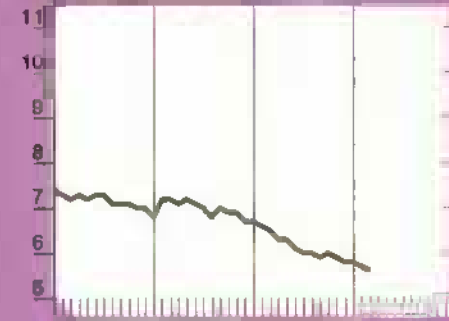
Inventory/sales<sup>4</sup>

Ratio



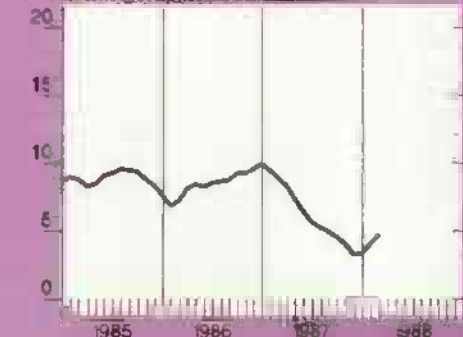
Unemployment rate<sup>5</sup>

Percent of all civilian workers



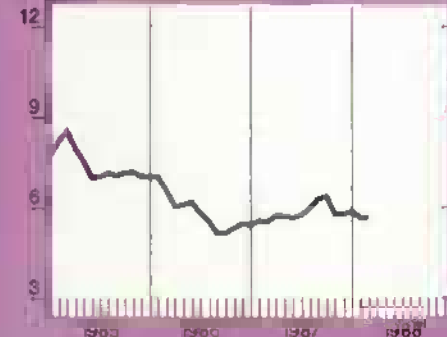
Money supply (M2)

Percent change from a year earlier



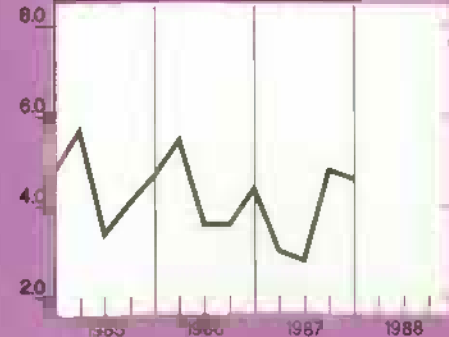
3-month Treasury bill rate

Percent



Savings rate<sup>6</sup>

Percent of personal income



<sup>1</sup>Percent change from a year earlier in 1982 dollars. Seasonally adjusted annual rates. <sup>2</sup>Billions of 1982 dollars, seasonally adjusted at annual rates.

<sup>3</sup>Nominal dollars. <sup>4</sup>Manufacturing and trade, seasonally adjusted, based on 1982 dollar. <sup>5</sup>Seasonally adjusted.

<sup>6</sup>Calculated from disposition of personal income in 1982 dollars, seasonally adjusted at annual rates.

Sources: U.S. Dept. of Commerce, U.S. Dept. of Labor, and the Board of Governors of the Federal Reserve System.

However, as the second camp argues, this continued demand also induces businesses to invest in new factories and equipment, thus increasing production and allowing demand to expand with little or no future price increases. A survey conducted in the first quarter by the Department of Commerce's Bureau of Economic Analysis confirms plans for faster investment spending.

According to the survey, industry intends to increase real spending on new factories and equipment by 8 percent in 1988. Manufacturing industries plan to spend 8.9 percent more this year. In contrast, real investment spending rose only 1.7 percent in 1987 and declined 2.6 percent in 1986.

A second inflation consideration revolves around labor market tightness. As unemployment declines, the potential for labor shortages and wage inflation rises. Unemployment has declined steadily for 6 months, and some analysts are concerned that the economy is fast approaching its "natural" unemployment rate: the rate below which there are strong inflationary pressures.

However, other analysts contend that there is no indication that wage-spiral inflation has begun. Unit labor costs rose only 2.4 percent, annual rate, in the first quarter, compared with a 4.5-percent rise in the fourth quarter and a 2-percent rise for all of 1987.

Although unemployment rates are currently low, the economy supported an average 4.9-percent unemployment rate between 1960 and 1973 without sparking an undue amount of inflation; the inflation rate then averaged 2.9 percent.

What may ultimately determine inflation's course in the next few months is the effect of food and energy prices. Oil prices, normally volatile, have been relatively low in recent months, but uncertainty remains about their future levels. If OPEC countries and non-OPEC oil producers were to agree to limit production, oil prices could jump dramatically.

Low food prices in the past few months have helped keep the overall price level down, but food prices, too, are volatile.

Retail food prices this year are expected to average 2 to 4 percent above 1987, a little slower than last year's rise.

While underlying inflation does appear to be increasing, it is still best described as moderate, with a slightly faster rate predicted for later in the year. A quick return to double-digit inflation is unlikely, barring a runup in food or energy prices.

After the October 1987 stock market crash, the Federal Reserve Board moved to lower interest rates to stabilize the economy. Short-term rates in early 1988 averaged 5.8 percent, compared with October's 6.4, and long-term rates declined nearly a full percentage point from October's high of 10.5.

With the economy showing continued strength, the Fed has already intervened, this time to raise interest rates slightly and constrain the economy's growth in order to keep inflation in check. Future intervention may depend largely on the trend of volatile domestic goods prices, industrial capacity limits, and import prices over the next several months.

Inflation is the key indicator to watch in the near term. Not only would a high rate put pressure on input prices, including wages, but interest rates would likely rise quickly also.

With fiscal policy committed to reducing the deficit, monetary policy would have to bear the brunt of the inflation fight. This would probably take the form of even higher interest rates as the Federal Reserve sought to slow down the economy. The burden would fall mostly on interest-sensitive sectors—including agriculture. Such a scenario appears unlikely, though.

If there is no substantial jump in food or energy prices, the most likely scenario—continued real growth with only slight increases in inflation and interest rates—should provide a stable and supporting background for the agricultural sector. [M. Iltuber and R. M. Monaco (202) 786-1784]



## Resources

### LAND VALUE OUTLOOK

This year's 3-percent increase in the average value of U.S. farmland reverses the slide that began in 1982. Signs of strengthening land values began to appear in early 1987 even though the average value on February 1, 1987, was down 8 percent from a year earlier.

Where will farmland values go from here? The patterns of the past year offer clues that values will increase at about the rate of inflation. With major farm legislation on the horizon, the largest uncertainty is the direction farm programs will take, and the consequent impact on returns to land.

#### *Changes in Land Values Vary Among Regions*

While this February's 3-percent increase from a year earlier was an upturn in nominal dollars, the gain fell short of the 4-percent inflation rate. Also, the national average conceals considerable variability among regions, States, and areas within States, as well as among land types, including dry and irrigated cropland, pasture, and woodland.

Most States that realized real increases were in a band from Maine to Nebraska. States outside this band with strong in-

creases were South Carolina, Florida, and New Mexico. Most States on the edges of the band showed increases less than the rate of inflation.

Decreased nominal values were primarily in Western and Southwestern States, including the Southern Plains, Mountain, and Pacific States, plus Louisiana. A 3-percent drop in North Carolina is due to lower values in western areas of the State and to surprising declines in value in some urban areas, where demand for non-agricultural uses has lessened.

Higher values in New Mexico (8 percent) and Idaho (4 percent) contrasted with the general weakness in Western and Southwestern States. These two States had relatively large drops in values last year (9 and 12 percent).

Montana had an 18-percent decrease last year but only a 2-percent decline in 1988. Moderating and offsetting changes in these States likely reflect a correction of the large drops in last year's market.

In contrast, Arizona showed a 5-percent increase last year, but a 12-percent decline in 1988, the largest for any State.

Values in the Pacific region were down from a year earlier, but the much lower rates of decline may signal a bottoming of the value drop that began in 1985. Values in the Pacific and Mountain regions may have been hurt by extreme drought.

The pattern of land value changes over the past year suggests that States that had the largest declines are experiencing the strongest rebounds. For example, between 1982 and 1987 nominal values in Minnesota and Iowa fell by 61 and 60 percent, respectively, and then increased 14 and 19 percent in 1988. And States that had the smallest nominal declines between 1982 and 1987 generally had the largest declines in 1988.

There were some exceptions to this equalizing pattern. Texas' nominal values, down only 11 percent between

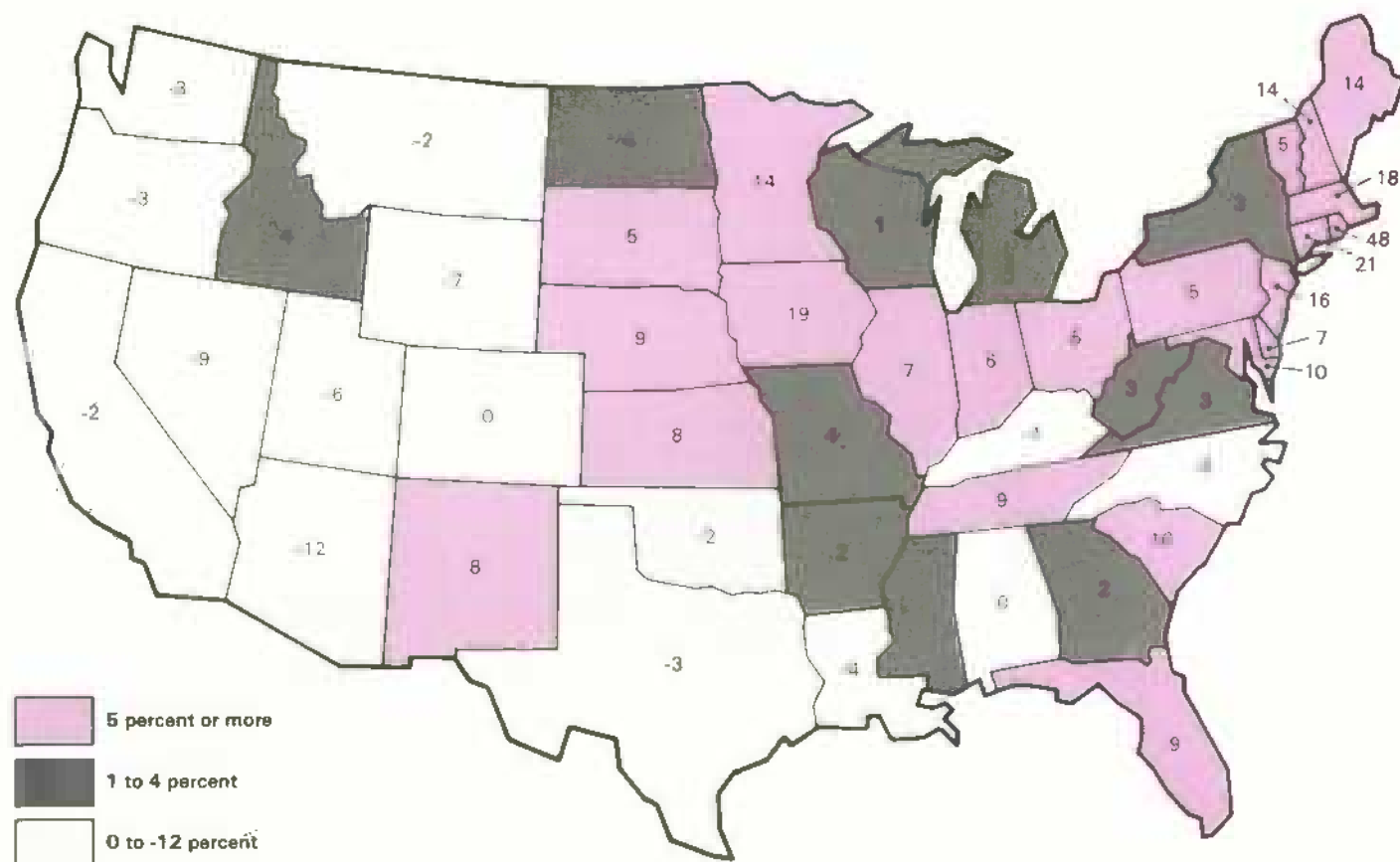
1982 and 1987 and only 3 percent in 1988, have held up better throughout the 1980's than the values of surrounding States. Over 1982-88, nominal values in the Northeast, Appalachia, and the Southeast (up 28 percent and down 10 and 14 percent, respectively) have also held up relatively well, benefiting from a more diverse agricultural base and strong urban-related demand.

### *Long-Term Trends Shed Light on Current Values*

The history of real land values since 1850 shows dramatic swings and sheds light on recent value shifts. From the Civil War until they spiked during World War I, land values worked persistently upward. Annual volatility during this period is not known because land value estimates are available only by 10-year census intervals.

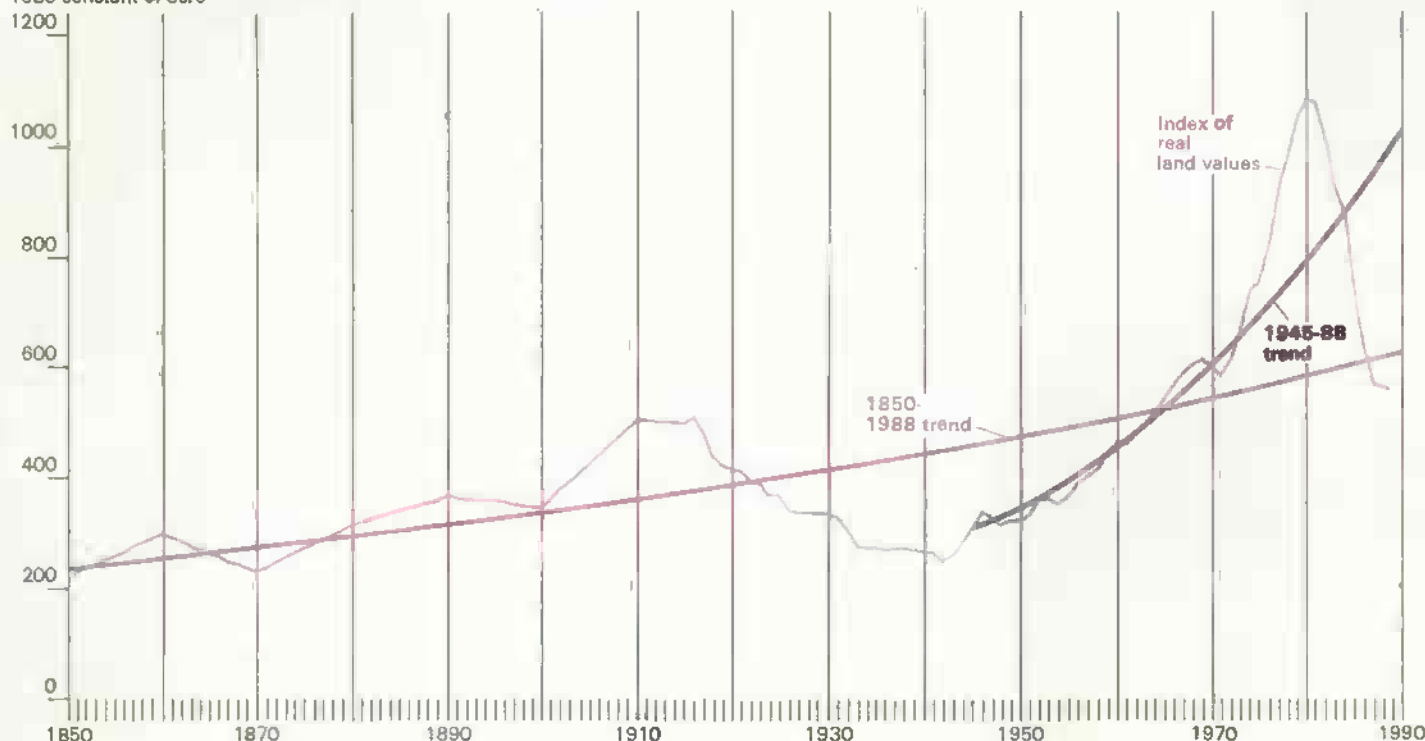
Land values began falling after World War I and were pushed lower by the depression of the 1930's. But, starting in 1945, values rose again, climbing with

Northeast and Corn Belt Lead Rise in Land Values



## Real Land Values Return to Long-Term Trend

1988 constant \$/acre



only minor interruption for the next 35 years. Implementation of massive Government programs to support agriculture during the 1950's and 1960's contributed to the rise.

Land values accelerated during the world food scarcities of the 1970's. But then they plummeted with the loss of export markets in the early 1980's and with the credit crunch due to heavy farm debts and high interest rates.

From their 1916 peak to their 1942 low, values fell by half. From their 1980 peak to their current level, again they fell by half. If one compares today's real land values with the 2.7-percent-per-year increase since 1945, values appear relatively low. However, if one compares them with the 0.6-percent-per-year trend since 1850, real land values appear to have returned to about normal.

### Real Interest Rates Affect Land Values

The overall upward trend for farmland values, aside from cyclical fluctuations, reflects the generally growing world demand for agricultural products and pressure from urbanization. These forces are partially offset by improved technologies that enhance yields.

Increases in real farmland values in part reflect the general perception of investors that growing agricultural demand will not be fully offset by improvements in yields—that land continues to become relatively scarce.

Taken alone, returns to farm assets (that part of farm income due to land and buildings) provide a puzzling picture of the land value declines of the 1980's. Real returns to farm assets were exceptionally high in 1973 and 1974, and these highs are associated with the acceleration of land values during the 1970's. However, the significant recovery in returns since 1983 was accompanied by continuing declines in real values, with 1988 showing a 1-percent real decline.

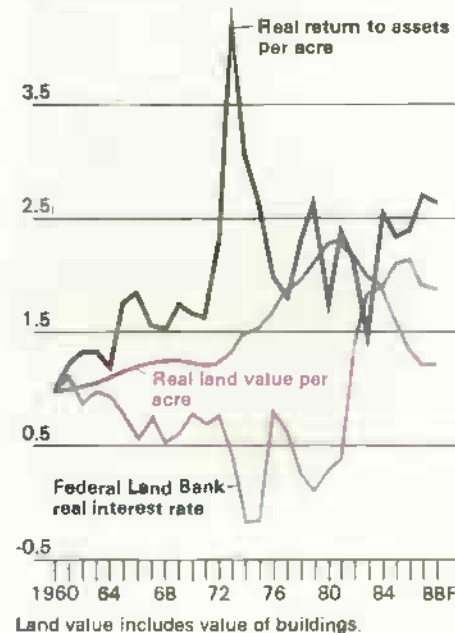
The anomaly can be explained by changes in the real interest rate (calculated as the nominal interest rate minus the inflation rate). With inflation running historically high in the late 1970's, the relatively high nominal interest rates translated into record-low real rates.

The reverse occurred in the 1980's; inflation dropped off, nominal interest rates declined slowly, and real rates rose sharply. This latter rise helped drive land

### Returns and Interest Rates Affect Land Values

1960=1.0

4.5





values down despite growing returns to farm assets. While real interest rates have historically been in the 3-4 percent range, the late 1970's saw rates of 1 percent and lower while the 1980's have seen rates of 6 to 9 percent.

The real interest rate impact on land values can be illustrated by comparing the bid price of land in 1980 and 1988, assuming constant farmland return expectations and the requirement that the rate of return on land was 2.5 percent in 1980 (a percentage point over the real Federal Land Bank average rate in the late 1970's).

Expected returns in 1980 would have had to average \$27 per acre to justify the \$1,082 per acre value (1988 dollars) with the rate of return at 2.5 percent. By contrast, an 8-percent rate of return, the rate necessary to cover real interest rates since 1983, would justify a value of only \$340 per acre with the expectations investors held in 1980. The 1988 average of \$564 is consistent with a return of real interest rates to their historic range of 3 to 4 percent, under the same expectations about return on farm assets.

#### ***Investors May Have Lower Expectations***

Despite the lack of a strong trend in returns to land since 1975, investors' expectations of returns may have changed. Underlying the fluctuating returns to land are significant changes in the source of returns. Between 1978 and 1982, Government program payments averaged 6 percent of net cash farm income. However, this proportion has been above 20 percent every year since 1982, averaging 23 percent during 1982-87.

Farm legislation in the 1980's assisted farmers while recognizing that downward adjustment from the export-led boom of the 1970's might be necessary. Target prices, for example, are scheduled to decline gradually through the remainder of the 1985 Food Security Act.

Thus, investors reasonably might expect farm program payments to decline and, unless they foresee renewed strength in farm product markets, particularly export markets, they will expect returns to land to decline as well.

While exports have picked up in recent years, few if any analysts expect a return to the export boom of the 1970's in the next several years. Trade liberalization proposed under the GATT negotiations, and the expiration of the current farm bill by 1990, mean that both exports and farm program payments, and the consequent impacts on land values, are uncertain. When uncertainty rises, farmers may discount future income, and make decisions as if they had lowered their expectations for returns.

#### ***Outlook: Values Will Probably Track Inflation***

Net cash income for 1988 is expected to be near the 1987 record. Land buyers, however, are looking ahead to the 1990 farm bill and the effects it will have on returns to farming.

Macroeconomic policy affects agriculture through interest rates and exchange rates and is also a significant uncertainty. Current projections are for a possible small increase in nominal interest rates, a steady inflation rate, and further small declines in the exchange rate of the dollar.

The modest recovery of nominal land values in 1988 will permit banks, insurance companies, and the Federal Credit System to reduce inventories of land they own because of foreclosures over the past several years, without incurring substantial additional losses. Debt-to-asset ratios among farmers are projected to continue to improve, leaving fewer farmers forced to sell land.

But, potential buyers are likely to be wary about bidding land prices up significantly, given the uncertainties that lie ahead. Regionally, the strong rebound in the Corn Belt is likely to be tempered in the year ahead, whereas the Pacific, Mountain, and Southern Plains regions may show somewhat more strength than they did in 1988.

Consistent with expected inflation of 3.5 to 4 percent, nominal land values may increase 2 to 4 percent for the year. [John Reilly (202) 786-1422]

#### **Upcoming Releases from the Agricultural Statistics Board**

The following list gives the release dates of the major Agricultural Statistics Board reports that will be issued by the time the July *Agricultural Outlook* comes off press.

##### **June**

- 1 Egg Products  
Poultry Slaughter
- 2 Minn.-Wis. Mfg. Grade 3  
Milk Final 1985-87
- 6 Dairy Products
- 7 Celery
- 9 Crop Production
- 10 Vegetables  
Vegetables-Annual
- 14 Turkey Hatchery
- 16 Milk Production
- 17 Cattle on Feed
- 20 Catfish
- 21 Farm Prod. Expenditures,  
1987 Prel.
- 22 Cherry Production (tent.);  
Cold Storage
- 23 Eggs, Chickens, & Turkeys
- 24 Vegetables;  
Livestock Slaughter
- 29 Peanut Stocks & Processing;  
Agricultural Prices-Monthly;  
Agricultural Prices-Annual
- 30 Grain Stocks;  
Hogs & Pigs

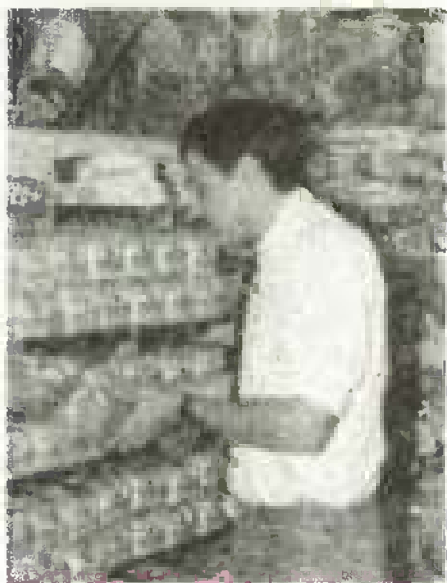
#### **Upcoming Economic Reports**

##### **Summary Released**

##### **Title**

##### **June**

- 9 World Ag. Supply & Demand
- 13 Pacific Rim
- 15 Agricultural Resources
- 16 Sugar & Sweeteners Yearbook
- 17 Agricultural Outlook
- 20 Tobacco
- 21 Rice
- 27 Foreign Ag. Trade of the U.S.  
China



## Food and Marketing

### FIRST-QUARTER CPI; OUTLOOK FOR SECOND HALF

First-quarter food prices rose 3.1 percent above the same quarter in 1987, according to the Consumer Price Index. Food purchased in restaurants and fast food outlets averaged 3.6 percent higher, while prices in grocery stores averaged 2.7 percent higher.

Pork and poultry prices averaged slightly lower than a year earlier, while beef prices were 5.8 percent higher. The CPI for fresh vegetables was up 12.6 percent and for processed fruit up 8.4 percent from first-quarter 1987.

Larger supplies of pork this year brought retail pork prices down 0.8 percent in the first quarter. An expected 6-percent increase in pork production for the whole year will help to keep retail pork prices lower for the remainder of 1988.

Retail poultry prices in the first quarter averaged 6.3 percent below a year earlier; poultry production for all of 1988 is expected to be about 6 percent above 1987. Most of the forecast annual price drop has already occurred in the first quarter. Retail prices for poultry through the rest of 1988 probably will be near or slightly below a year earlier.

In contrast, retail beef prices averaged 5.8 percent above a year earlier during the first quarter. Winter storms temporarily disrupted movement of cattle to slaughter, causing tighter beef supplies and higher prices.

Beef supplies for all of 1988 are expected to decrease 2 to 4 percent below 1987. The largest price differential, however, was seen in the first quarter. During the rest of the year, retail beef prices will likely average only 1 to 2 percent above 1987.

Increased pork and poultry production in 1988 will more than offset lower beef production, so that total red meat and poultry supplies will be record large. Because of the big supplies, the CPI for total red meats will likely average less than 1 percent above 1987.

### Fresh Vegetables Up Sharply

The CPI for fresh vegetables during the first quarter averaged 12.6 percent above 1987, because of sharply higher lettuce prices. Lettuce production in central California continued to be plagued by a white fly infestation (the flies carry a virus which damages lettuce).

In addition, cold weather slowed growth of lettuce in Florida, causing temporary supply shortages. The result was higher prices through the first quarter.

Lettuce production has now recovered, and retail prices have returned to normal. Because of strong consumer demand, lettuce prices are among the most volatile of all food commodity prices. The least hint of shortage can cause prices to increase considerably.

The CPI for processed fruit is up from a year ago. Smaller stocks of some canned fruits have pressured the CPI higher. In addition, higher prices of frozen concentrated orange juice (FCOJ) pushed the CPI for processed fruit up. Although domestic supplies of FCOJ are larger this year, prices are higher because of steeper world FCOJ prices. World prices rose because of price increases by Brazil.

### Eggs Down

First-quarter egg prices averaged 9.9 percent below a year earlier because of strong supplies. Nonalcoholic beverage prices declined an average 3.1 percent because of lower coffee prices. Fish and seafood prices averaged 7.1 percent higher; supplies continue tight relative to growing consumer demand. Most other

Changes in Food Prices, 1985-88

	1986	1987	1988 forecast
<b>Consumer Price Indexes</b>			
	Percent change from a year earlier		
All food	3.2	4.2	2 to 4
Food away from home	3.9	4.0	3 to 5
Food at home	2.9	4.3	1 to 3
Meat, poultry, & fish	4.3	6.4	0 to 2
Meats	3.2	7.5	0 to 2
Beef & veal	0.6	7.6	1 to 3
Pork	8.2	8.2	-2 to -4
Other meats	2.6	6.3	1 to 3
Poultry	7.5	-1.5	-1 to -3
Fish & seafood	9.2	10.6	7 to 10
Eggs	6.9	-5.0	3 to 5
Dairy products	0.2	2.5	-1 to 2
Fats & oils	-2.2	1.5	2 to 4
Fruits & vegetables	0.9	8.8	3 to 6
Fresh fruits	2.1	11.3	2 to 4
Fresh vegetables	4.0	12.9	3 to 5
Processed fruits & vegetables	-1.6	3.5	5 to 8
Sugar & sweets	3.2	1.8	1 to 3
Cereals & bakery products	2.8	3.5	3 to 5
Nonalcoholic beverages	5.9	-2.6	1 to 3
Other prepared foods	2.6	4.2	3 to 5

Source of historical data: Bureau of Labor Statistics, U.S. Department of Labor. Forecasts: ERS, USDA.

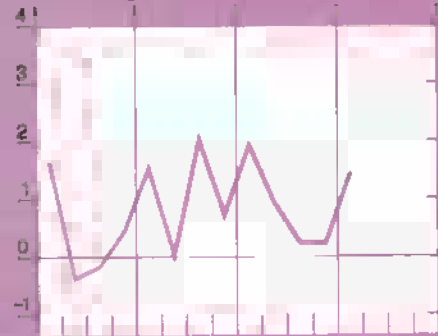
CPI: Total food<sup>a</sup>

Percent change



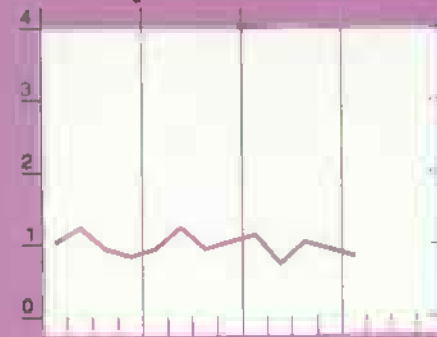
CPI: Food at home<sup>a</sup>

Percent change



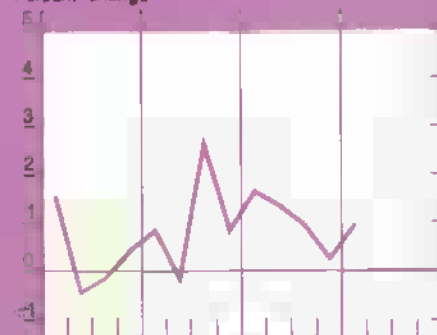
CPI: Food away from home<sup>a</sup>

Percent change



Retail cost of food<sup>1</sup>

Percent change



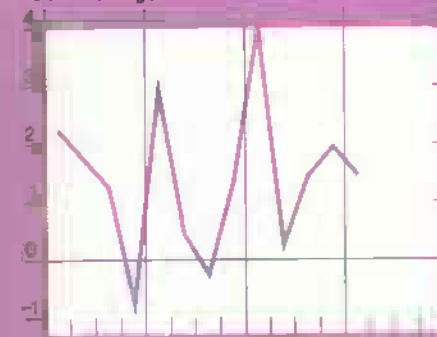
Farm value of food<sup>1</sup>

Percent change



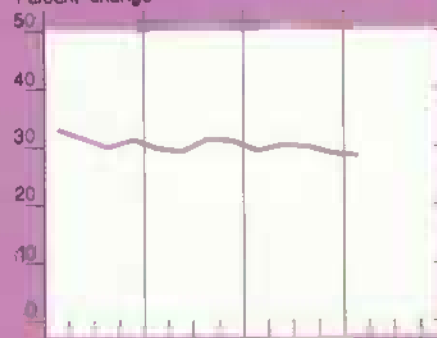
Farm-retail spread<sup>1</sup>

Percent change



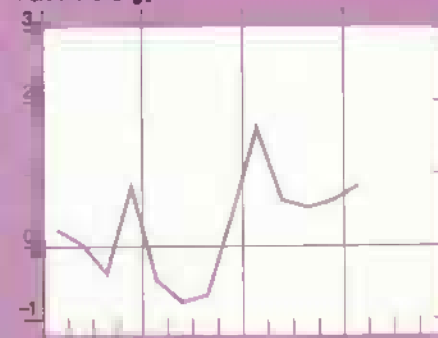
Farm value/retail cost<sup>1</sup>

Percent change



Food marketing cost index<sup>2</sup>

Percent change



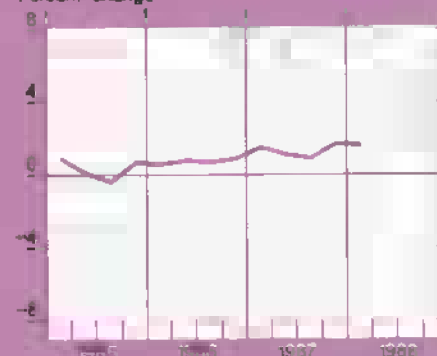
Index of hourly earnings<sup>3,4</sup>

Percent change



Index of packaging prices<sup>4</sup>

Percent change



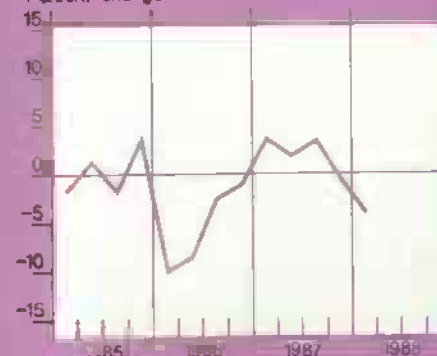
Index of rail freight rates<sup>4</sup>

Percent change



Index of energy rates<sup>4</sup>

Percent change



<sup>a</sup>CPI unadjusted. <sup>1</sup>Index based on market basket of farm foods. <sup>2</sup>Index of changes in labor, packaging, transportation, energy, and other marketing costs.

<sup>3</sup>In food retailing, wholesaling, and processing. <sup>4</sup>Component of food marketing cost index.

All series expressed as percentage change from preceding quarter, except for "Farm value/retail cost" chart.



food categories of the CPI showed only 1- and 2-percent increases.

The first-quarter rise in the CPI for food is consistent with the expected 2- to 4-percent rise in food prices for all of 1988. Supplies of most foods are still plentiful at the farm level, so farm prices on average will have little impact on the CPI.

The costs of processing, packaging, and shipping food products tend to rise at about the same rate as the general rate of inflation, which could add 4 to 5 percent to the farm-to-retail price spread. Another 1 percent or so is likely to be added as marketing inputs—such as labor, advertising, and in-store facilities—are increased.

Strength in consumer demand for food is expected to increase only slightly in 1988. Real disposable personal income is likely to climb 2 to 3 percent. The unemployment rate is the lowest in 14 years.

While these are positive factors for consumer demand, food demand changes very little as income increases. Demand for nonfood goods is likely to capture most of the growth in consumer income in the short run. Nevertheless, some of the added income is likely to show as increased food demand, particularly among consumers who choose to upgrade the foods they purchase. [Ralph Parlett (202) 786-1870]

## THE MARKETING BILL FOR 1988

The marketing bill—the difference between consumer food expenditures and the farm value of domestically produced farm foods—is forecast to rise 6.6 percent in 1988, to \$302 billion. This rise is considerably larger than the 4.7-percent increase of 1987. While expenditures for domestically produced foods will rise 4.8 percent, the farm value is expected to decline 1 percent.

The farm value drop is largely due to bigger supplies and lower prices for live-stock and poultry products, which account for two-thirds of the farm value of food. A 50-cent reduction in the support price of milk is likely to result in a decline in the farm value of dairy products, despite a slight increase in consumption.

The farm value of fruit and vegetables will slip as lower prices result from larger supplies of lettuce, potatoes, apples, pears, and strawberries. These reductions in farm value will be partially offset by higher farm prices for grains and oil crops, resulting from stronger export demand and reduced grain stocks.

Consumer food expenditures will rise at about the same rate as in 1987. Retail

prices of a number of major commodities, particularly pork and poultry, are expected to decline in the face of larger supplies, but moderate food price inflation is expected overall.

Price inflation could restrain the increases in volume purchased. Moreover, consumer food demand should change little during the year because most of the expected disposable income increase will be spent on nonfood items.

### Labor and Packaging Up Most

Labor and packaging costs will account for about 60 percent of the 1988 increase in the marketing bill.

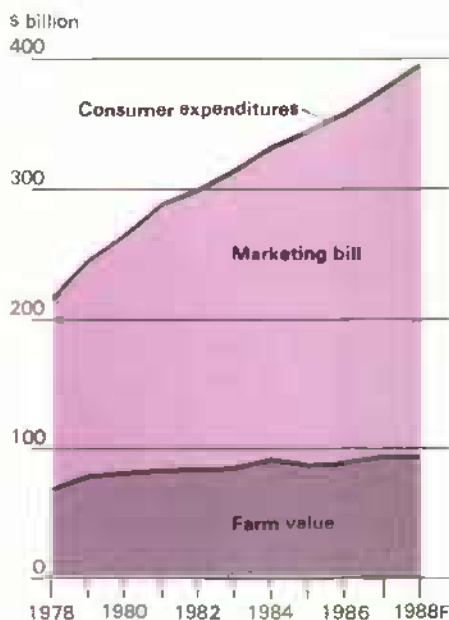
Labor costs, which include wages and salaries, benefit costs, imputed proprietary earnings, and food service tips, absorb 46 percent of the marketing bill. Total labor costs grew only 5.2 percent in 1987, the slowest growth of the past two decades. Yet labor costs in 1987 increased more than the overall marketing bill, mainly because the number of workers in the food industry has been growing.

The slowdown in labor cost growth is largely the result of labor contract settlements. Contracts negotiated between 1985 and 1987 likely will hold down labor cost growth during 1988-90, because contracts are typically negotiated for 3 years.

Food industry employment rose 2.1 percent last year, accounting for about half of the rise in the labor cost bill. Eating and drinking places, with 53 percent of the total industry employment, had 2 percent more employees last year, an increase considerably less than the 6-percent rise in 1985 or the 3 percent in 1986.

Employment by retailers increased 3 percent, accounting for 26 percent of total food industry employment in 1987. Employment by food manufacturers and wholesalers, 21 percent of food industry workers, rose 1.1 percent. Although employment rose at a slow pace last year, it contributed substantially to the rise in labor costs.

Cost of Marketing Food Is Growing Faster Than Its Farm Value



Selected Components of Consumer Food Spending

	1977	1984	1985	1986	1987
\$ billion					
Consumer expenditures	190.9	332.0	345.4	359.6	377.1
Farm value	58.2	91.4	88.3	89.1	93.9
Total marketing bill	132.7	240.6	257.1	270.5	283.2
Labor*	58.3	109.3	116.5	124.2	130.7
Packaging materials	15.1	26.2	26.9	27.7	29.5

\*Includes Pensions and health insurance premiums. Also includes imputed earnings of proprietors, partners, and family workers not receiving stated remuneration.

### Labor Costs Increasing in 1988

The trend of small increases in labor costs over the past few years has bottomed out. Projected 1988 developments on the labor front include the following.

*Two-tiered wage contracts*, in which newer workers are hired at lower wages and with fewer benefits or less flexible work rules, are losing popularity because of morale problems and high turnover on the lower tier. They are likely to be phased out over the next few years, placing upward pressure on wage rates.

*Lump sum payments* are provided for in the contracts of 40 percent of all workers involved in 1988 collective bargaining. Lump sum benefits in lieu of wage increases (or to offset wage reductions) hold down labor costs because they eliminate the compounding effects of wage increases and do not raise the wage rate base (which in turn serves as the foundation for benefit levels and subsequent wage negotiations).

*Cost-of-living adjustments (COLA's)* were suspended or eliminated in some recently negotiated settlements, in return for features such as lump sum payments. Thirty-two percent of those workers whose contracts are up for renegotiation lost their COLA's in this manner. Contracts which include COLA's have larger total wage adjustments and will be a major topic at the bargaining table this year.

*Backloaded contracts* provide for lower specified wage adjustments in the first

year of a contract than in subsequent years. Backloaded contracts generally hold down labor costs because they have smaller wage increases, and because subsequent wage increases are calculated on the lower wage in the first year of the contract.

Unions are beginning to demand restoration of previously accepted wage concessions. Frontloaded contracts, in which the largest wage increase comes in the first year, are likely to become more common again.

*Benefit costs* have slowed to about the same rate as the wage and salary growth rate. Employees are having to pay higher deductibles for medical insurance, higher premiums, and a larger share of total costs. Benefits have been reduced in many cases, leading to reduced labor costs. However, these cost reductions could be offset by higher Social Security taxes in 1988.

### Packaging Materials Cost More in 1987

The cost of packaging materials, comprising 10 percent of the marketing bill, rose 6.5 percent last year. The increase was largely attributable to higher costs for paper and paperboard products, which account for nearly 40 percent of total packaging costs. The value of paperboard shipments to the food industry rose 7.6 percent.

A number of major developments will continue to contribute to rising costs of paperboard, folding paperboard boxes, and glass bottles. The most important of these is the high price of kraft linerboard, which is the major input for corrugated

and solid fiber boxes. Supplies should remain tight because of capacity constraints at production plants.

Moreover, demand for kraft linerboard will rise because of greater use of corrugated paperboard for retail point-of-purchase displays, as well as because of increased consumer food purchases. Higher folding paperboard box prices will reflect increased demand for major end uses, such as packaging for fast food, convenience foods, and single-portion meals.

Glass bottle prices will rise because of costly production methods, but the increase will be mitigated by technological improvements that will help hold down labor costs and increase productivity (for example, computerization). The price of metal cans is dropping because of improved production and such technological advances as better coating processes. Use of cheap plastic packaging materials will continue to jump.

Energy costs now comprise 3.5 percent of total consumer food expenditures, and they are expected to rise little in 1988. Crude oil supplies will remain large, since OPEC failed to agree on production cutbacks. The resulting oil price fall will reverberate to other sectors of the food marketing industry and dampen cost increases for intercity transportation and major packaging inputs, such as resin for plastics.

Advertising expenditures have risen sharply over the past few years, now accounting for 4.5 percent of consumer expenditures. Food manufacturers and retailers are promoting new value-added convenience foods, such as frozen dinners that can be microwaved. The demand for convenience foods implies continued introduction of new products, with heavy advertising accompanying them. [Howard Elitzak (202) 786-1870]



TASS from SOVFOOT

## Soviet Grain Forecast for 1988: 215 Million Tons

Soviet grain production may total 215 million tons in 1988, according to USDA estimates. This surpasses grain output in both 1986 and 1987, and marks the first time ever that Soviet production will have topped 200 million tons in 3 consecutive years.

Soviet grain production is reported on a bunkerweight basis—not discounted for moisture and foreign materials. This system of measuring, which breeds incentives for poor quality grain, is believed to be on its way out. USDA's estimate of dockage and waste for the 1988 Soviet crop is 25 million tons, or 12 percent of total production, down from last year's above-average 30 million tons, or 14 percent.

The Soviets missed their 1987 target of 232 million tons by 21 million, and are not expected to meet their 1988 target of 235 million. Longer term targets call for output of 250-255 million tons by 1990 and 260-280 million by 1995. The Ukraine's 1988 grain plan calls for 51 million tons and the target for Kazakhstan is 30 million.

The Soviet grain yield for 1988 is projected to match the 1978 record of 1.85 tons per hectare, about 25 percent above the 1981-85 average. USDA estimates put 1988 Soviet grain area at 116 million hectares, slightly up from the 10-year low of 115.2 million in 1987. As of May 2, the pace of spring grain seeding was slightly below average, with 20.6 million hectares sown to small grains and pulses.

The gradual decline in total grain area in recent years is the result of Soviet policies to:

- raise fallow area,
- convert grain areas to more suitable feed crops, and
- concentrate on the most fertile soils.

In 1987, fallow area totaled about 21 million hectares and feed crop area was a record 73 million hectares.

### Wheat Production Projected To Rise 10 Percent

Soviet 1988 wheat production is estimated at 92 million tons, 10 percent above last year's poor crop. The spring wheat crop largely accounted for the reduction in the quality and size of last year's output, which suffered from persistent rain during harvesting in the New Lands. Since last year's unusually wet harvest weather is unlikely to be repeated in the New Lands this fall, the quality of the spring wheat crop should be better.

Total 1988 wheat area is estimated at 48.5 million hectares, up 4 percent from last year's alltime low. The reduced wheat area in 1987 is attributable largely to the decrease in winter wheat, which fell because of the very dry autumn in 1986 and above-average winterkill. The total wheat yield is estimated at a record 1.90 tons per hectare, the second highest ever and 7 percent above 1987. Winter wheat is expected to be near last year's record yield, and spring wheat is forecast to rebound to near the record yield in 1986.

A constraint on spring wheat yields could be lower quality seed supplies this year. As a result of adverse weather during harvesting in spring wheat areas last autumn, the availability of quality spring seeds is estimated lower than usual.

Below-average supplies of high-quality seeds, particularly with regard to moisture content and germination standards, were reported in Kokchetav, North Kazakhstan, Chimkent, Kustanai, Ural'sk, Tyumen, and Novosibirsk oblasts, and in the Bashkir ASSR. In early March, 15 percent of the seed supplies in the Russian Republic were classified as having below-standard germination rates, twice as much as in 1987. In West Siberia, the percentage of these below-standard seeds was reportedly five times greater than in 1987.

Despite these particular cases, *Pravda* reported in March that more than 70 percent of the country's spring seed supplies met the first and second highest grades. About 18.5 million tons of seeds for small grains and pulses are required for spring sowing on state and collective farms, according to one report. Good supplies of high-quality spring seeds are reported in the Ukraine, Byelorussia, Lithuania, and Georgia.

Adequate moisture last fall and a warmer-than-usual winter and spring account for part of the estimated increase in winter grain yields. Also, the large share of wheat covered by intensive technology practices is expected to boost yields. This year, nearly all of the winter wheat is estimated to be under intensive technology, up from 80 percent last year. Spring wheat was about 40 percent under intensive technology both last year and this.



## Supply &amp; Use of Grain, USSR 1/

Year beginning July 1	Produc- tion 2/	Trade		Avail- ability	Utilization						Stock change 3/
		Imports	Exports		Seed	Indus- trial	Food	Dockage- waste	Feed	Total	
Million metric tons											
Total grains 4/											
1981/82	158.2	47.3	0.5	205	25	5	47	16	118	211	-6
1982/83	186.8	34.3	0.5	221	25	5	47	19	118	214	+7
1983/84	192.2	32.5	0.5	224	26	5	47	21	120	218	+6
1984/85	172.6	55.5	0.5	228	24	6	47	19	123	219	+9
1985/86	191.7	29.9	0.5	221	24	5	47	18	126	220	+1
1986/87	210.1	27.5	0.5	237	25	5	47	23	130	230	+7
1987/88	211.3	32.5	0.5	243	25	5	47	30	130	237	+6
1988/89 5/	215.0	26.0	1.0	240	25	5	47	25	132	234	+6
Wheat											
1981/82	81.1	20.3	0.5	101	11	2	36	8	47	104	-3
1982/83	84.3	20.8	0.5	105	11	2	36	9	43	101	+4
1983/84	77.5	20.5	0.5	98	11	2	36	9	35	93	+4
1984/85	68.6	28.1	0.5	96	11	2	36	8	35	91	+5
1985/86	78.1	15.7	0.5	93	11	1	36	8	36	92	+1
1986/87	92.3	16.0	0.5	108	11	1	36	10	45	103	+5
1987/88	83.3	22.0	0.5	105	11	1	36	13	39	100	+4
1988/89 5/	92.0	15.0	1.0	106	11	1	36	11	43	102	+4
Coarse grains 6/											
1981/82	69.3	26.0	0	95	13	3	7	7	68	98	-3
1982/83	91.8	12.5	0	104	13	3	7	9	69	101	+3
1983/84	101.9	11.5	0	113	13	3	7	11	78	112	+2
1984/85	90.5	26.9	0	117	12	4	7	10	81	114	+4
1985/86	100.0	13.7	0	114	12	4	7	9	82	114	0
1986/87	105.9	11.0	0	117	13	4	7	11	80	115	+2
1987/88	113.7	10.0	0	124	13	4	7	15	83	122	+2
1988/89 5/	109.0	10.0	0	118	13	4	7	13	80	117	+2

1/ All are USDA estimates and forecasts except production 1981-87. Rounded to the nearest million tons. Except for production and trade data. Totals may not add because of rounding. 2/ Calendar year basis. 3/ Difference between availability and total use. 4/ Includes wheat, coarse grains, buckwheat, rice, pulses, and miscellaneous grains. 5/ USDA May 1988 forecast. 6/ Includes rye, barley, oats, corn, and millet.

### Coarse Grain Output Estimated Down From 1987's 11-Year High

Coarse grain production in 1988 is not expected to match last year's near-record output, as both area and yield are projected down. Total production is estimated at 109 million tons, down 4 percent from 1987, but still larger than any season's crop since 1976.

Total coarse grain area is estimated at 58.5 million hectares, down slightly from 1987 but about the same as in 1986. Reseeding of areas affected by above-average winterkill with spring barley and corn accounted for much of the increase in coarse grain area in 1987. The average yield is projected at 1.86 tons per hectare, down 3 percent from the 1987 record but above 1986.

### Wheat Imports Forecast Lower

Total Soviet grain imports are projected at 26 million tons in 1988/89 (July-June), down 20 percent from 1987/88 but about the same as in 1986/87. The expected reduction must be viewed in terms of not only the larger wheat harvest expected in 1988, but also the substantially reduced dockage/waste es-

timated for this year's crop. Imports averaged about 40 million tons in 1981/82-1985/86. Fewer imports will be needed this coming year because of an estimated increase in overall domestic grain production and quality.

Soviet wheat imports, which totaled an estimated 22 million tons in 1987/88 (the highest in 3 years), are forecast at 15 million, slightly less than in 1985/86 and 1986/87. A smaller and poorer quality Soviet wheat crop in 1987, and U.S. offers of bonus wheat through the Export Enhancement Program, largely account for the jump in Soviet wheat imports in 1987/88. U.S. wheat sales to the USSR for 1987/88 (July-June) are record high.

Higher estimated Soviet wheat production in 1988 is expected to decrease import needs for 1988/89. Moreover, a better quality crop in 1988 should reduce the USSR's demand for milling-quality wheat. Some switching back to their pattern of purchasing cheaper feed-quality wheat could occur; this will depend on feed wheat prices relative to other grains.

Soviet imports of coarse grains in 1988/89 are forecast at 10 million tons, the same as the 9-year low in 1987/88. Corn, primarily from the United States and Argentina, and barley, mainly from Canada and the EC, comprise the bulk of Soviet coarse grain imports.

# Area, Yield, & Production of Grain, USSR 1/

Year	Wheat 2/			Rye	Barley	Oats	Corn	Other 3/	Total grain
	Winter	Spring	Total						
1,000 hectares									
Area									
1966-70 average	18,280	48,894	67,174	11,505	20,331	8,680	3,517	10,876	122,083
1971-75 average	18,443	43,025	61,468	8,500	28,370	11,310	3,596	10,743	123,987
1976-80 average	20,471	40,240	60,711	7,714	34,011	12,080	2,969	10,421	127,905
1981-85 average	18,709	35,023	53,732	9,331	30,530	12,352	4,000	11,441	121,386
1986	16,632	32,096	48,728	8,741	29,964	13,173	4,223	11,648	116,477
1987	15,319	31,365	46,684	9,725	30,654	11,790	4,573	11,786	115,212
1988 4/	17,000	31,500	48,500	9,500	29,900	12,000	4,600	11,500	116,000
Metric tons per hectare									
Yield 1/									
1966-70 average	1.96	1.11	1.34	1.12	1.50	1.38	2.72	1.16	1.37
1971-75 average	2.26	1.10	1.45	1.35	1.53	1.31	2.84	1.19	1.46
1976-80 average	2.48	1.22	1.64	1.41	1.62	1.42	3.22	1.21	1.60
1981-85 average	2.28	1.01	1.45	1.53	1.42	1.42	3.27	1.22	1.49
1986	2.80	1.43	1.89	1.76	1.80	1.66	2.95	1.22	1.80
1987	3.02	1.18	1.78	1.86	1.91	1.57	3.23	1.55	1.83
1988 4/	3.03	1.29	1.90	1.84	1.82	1.58	3.26	1.48	1.85
1,000 metric tons									
Production									
1966-70 average	35,888	54,304	90,192	12,834	30,454	11,938	9,558	12,585	167,561
1971-75 average	41,590	47,345	88,935	11,493	43,289	14,812	10,215	12,810	181,554
1976-80 average	50,725	48,948	99,673	10,880	55,150	17,161	9,568	12,595	205,027
1981-85 average	42,726	35,204	77,930	14,280	43,480	17,540	13,080	14,001	180,311
1986	46,528	45,778	92,306	15,248	53,889	21,929	12,479	14,217	210,068
1987	46,237	37,075	83,312	18,055	58,409	18,495	14,808	18,286	211,365
1988 4/	51,500	40,500	92,000	17,500	54,500	19,000	15,000	17,000	215,000

1/ Some figures may not add or calculate because of rounding. 2/ Production data for winter wheat and spring wheat derived from official area and yield data for 1981-85. 3/ Includes millet, buckwheat, rice, pulses, and miscellaneous grains. 4/ USDA May 1988 forecast.

## Feed Use Up; Other Uses Down or Unchanged

Domestic use of grain for feed is estimated at a record 132 million tons, reflecting the continued Soviet policy of boosting livestock production. USDA's estimate for seed use of grain is 25 million tons, unchanged from last year. According to Soviet officials, 3-4 million tons of seed grain each year are wasted because of over seeding and below-standard quality.

Industrial use of grain remains below the 1984 peak, because of decreased vodka production. As part of General Secretary Mikhail Gorbachev's anti-alcoholism campaign, Soviet production of vodka in 1987 declined for the third consecutive year, down 16 percent from 1986 and 58 percent from 1980. (Both wheat and rye are used in making vodka; barley is used in beer.)

However, as state production of alcoholic beverages has declined, illegal distilling has risen dramatically. In 1987, more than 500,000 people were fined or arrested for the illegal production of alcohol. The number of fines and arrests is up 13 times from 1984. Because of public tensions over the reduction in vodka for sale, Soviet authorities have decided to increase alcohol production—mainly beer, wine, and brandy—in 1988.

Further additions to grain stocks of 6 million tons are estimated this year, as the Soviets continue to rebuild state reserves. Food use of grain, estimated at 47 million tons, remains unchanged, as declines in per capita consumption offset population growth. [Christian J. Foster (202) 786-1620]

# Statistical Indicators

## Summary Data

Table 1.—Key Statistical Indicators of the Food & Fiber Sector

	1987				1988				
	I	II	IV	Annual	I	II F	III F	IV F	Annual F
Prices received by farmers (1977=100)	128	128	129	127	130	127	126	127	128
Livestock & products	149	150	144	146	148	143	142	142	144
Crops	106	105	113	106	111	110	110	111	111
Prices paid by farmers, (1977=100)									
Prod. items	147	148	150	147	152	154	153	153	153
Commodities & services, incl. taxes, & wages	162	164	165	162	165	169	169	168	168
Cash receipts (\$ bil) 1/	130	139	136	134	145	132	140	132	134-139
Livestock (\$ bil)	73	79	75	74	73	70	75	72	71-74
Crops (\$ bil)	58	60	61	59	72	63	65	60	64-67
Market basket (1967=100)									
Retail cost	303	305	306	303	308	--	--	--	--
Farm value	245	245	235	240	234	--	--	--	--
Spread	336	341	347	340	352	--	--	--	--
Farm value/retail cost (%)	30	30	30	30	31	--	--	--	--
Retail Prices (1982-84=100)									
Food	113	114	114	114	116	117	117	118	117
At home	112	112	112	112	114	114	115	116	115
Away-from home	116	118	119	117	120	121	122	123	121
Agricultural exports (\$ bil) 2/	6.5	6.9	8.5	27.9	8.7	7.7	7.6	9.0	32.5
Agricultural imports (\$ bil) 2/	5.3	4.8	5.2	20.6	5.5	5.0	4.8	5.0	20.5
Production *									
Red meat (mil lb)	9,240	9,624	10,096	38,442	9,665	9,643	9,630	9,668	38,606
Poultry (mil lb)	4,932	5,195	5,112	19,772	4,988	5,310	5,410	5,200	20,908
Eggs (mil doz)	1,438	1,438	1,479	5,797	1,463	1,420	1,415	1,465	5,763
Milk (bil lb)	37.4	35.5	34.7	142.5	36.1	38.2	36.4	35.2	146.0
Consumption, per capita:									
Red meat and poultry (lb)	52.5	53.8	56.8	215.0	53.8	55.1	55.2	56.2	220.2
Corn beginning stocks (mil bu) 3/	8,248.2	6,332.2	4,881.7	4,881.7	9,768.5	7,361.5	--	--	--
Corn use (mil bu) 3/	1,916.5	1,451.0	2,177.9	7,409.8	2,137.6	--	--	--	--
Prices: 4/									
Choice steers--Omaha (\$/cwt)	68.60	65.04	64.31	64.60	68.28	68-72	63-69	64-70	64-70
Barrows and gilts--7 mths. (\$/cwt)	56.18	59.97	43.51	51.69	44.74	44-48	44-50	40-46	42-48
Broilers--12-city (cts/lb)	48.2	48.7	42.5	47.4	45.4	46-50	44-50	40-46	43-49
Eggs--NY Gr. A large (cts/doz)	58.9	63.5	59.2	61.6	55.0	50-54	58-64	63-69	56-62
Milk--all at plant (\$/cwt)	12.07	12.33	12.83	12.51	12.23	11.00-11.60	11.35-12.05	11.90-12.70	11.50-12.10
Wheat--Kansas City HRW (\$/bu)	2.94	2.65	2.86	2.72	3.20	--	--	--	--
Corn--Chicago (\$/bu)	1.82	1.68	1.74	1.64	1.95	--	--	--	--
Soybeans--Chicago (\$/bu)	5.37	5.16	5.36	5.19	6.14	--	--	--	--
Cotton--Avg. spot mkt. (cts/lb)	64.7	73.5	63.7	64.3	59.1	--	--	--	--
	1980	1981	1982	1983	1984	1985	1986	1987 P	1988 F
Gross cash income (\$ bil) 1/	143.3	146.0	150.6	150.4	155.1	156.9	152.0	156	158-159
Gross cash expenses (\$ bil) 1/	109.1	113.2	112.5	113.3	116.3	109.6	100.1	99	100-104
Net cash income (\$ bil) 1/	34.2	32.8	38.1	37.1	38.8	47.3	52.0	57	50-55
Net farm income (\$ bil) 1/	16.1	26.9	23.5	12.7	32.0	32.3	37.5	45	40-45
Farm real estate values (1977=100) 5/	145	158	157	148	146	128	112	103	106

1/ Quarterly data seasonally adjusted at annual rates. 2/ Annual data based on Oct.-Sept. fiscal years ending with year indicated. 3/ Dec.-Feb. first quarter; Mar.-May second quarter; June-Aug. third quarter; Sept.-Nov. fourth quarter, Sept.-Aug. annual. Use includes exports and domestic disappearance. 4/ Simple averages. 5/ As of February 1. P = preliminary. F = forecast. \* = commercial production.



# U.S. and Foreign Economic Data

Table 2.—U.S. Gross National Product & Related Data

	Annual			1987				1988
	1985	1986	1987	I	II	III	IV	I P
\$ billion (quarterly data seasonally adjusted at annual rates)								
Gross national product	4,010.3	4,235.0	4,488.5	4,377.7	4,445.1	4,524.0	4,607.4	4,660.9
Personal consumption expenditures	2,629.4	2,799.8	2,967.8	2,893.8	2,943.7	3,011.3	3,022.6	3,068.7
Durable goods	368.7	402.4	413.7	396.1	409.0	436.8	413.0	425.7
Nondurable goods	913.1	939.4	982.9	969.9	982.1	986.4	993.1	993.9
Clothing & shoes	157.2	167.5	177.0	174.0	175.8	178.7	179.6	177.2
Food & beverages	472.8	497.8	515.8	514.8	515.0	514.0	519.3	520.7
Services	1,347.5	1,458.0	1,571.2	1,527.7	1,552.6	1,588.1	1,616.5	1,649.0
Gross private domestic investment	641.6	671.0	717.5	699.9	702.6	707.4	760.2	761.9
Fixed investment	631.6	655.2	671.5	648.2	662.3	684.5	690.8	704.9
Change in business inventories	10.0	15.7	46.1	51.6	40.3	22.9	69.4	57.0
Net exports of goods & services	-79.2	-105.5	-119.6	-112.2	-118.4	-123.7	-124.3	-115.4
Government purchases of goods & services	818.6	869.7	922.8	896.2	917.1	929.0	948.8	945.6
1982 \$ billion (quarterly data seasonally adjusted at annual rates)								
Gross national product	3,607.5	3,713.3	3,821.0	3,772.2	3,795.3	3,835.9	3,880.8	3,902.6
Personal consumption expenditures	2,352.6	2,450.5	2,497.2	2,475.9	2,487.5	2,520.7	2,504.6	2,528.2
Durable goods	352.7	383.5	388.2	375.9	385.4	406.9	384.5	396.2
Nondurable goods	849.5	877.2	878.1	883.2	879.0	875.7	874.6	874.2
Clothing & shoes	147.9	158.0	159.5	160.4	157.3	161.7	158.6	156.7
Food & beverages	436.5	444.9	441.2	447.5	441.6	437.1	438.6	439.0
Services	1,150.4	1,189.8	1,230.9	1,216.9	1,223.1	1,238.1	1,245.6	1,257.7
Gross private domestic investment	636.1	654.0	687.6	671.8	673.7	681.9	723.1	738.4
Fixed investment	628.7	640.2	644.7	624.2	634.7	657.3	662.6	680.5
Change in business inventories	7.4	13.8	42.9	47.6	39.0	24.9	60.5	57.9
Net exports of goods & services	-108.2	-145.8	-135.5	-135.2	-132.7	-138.4	-135.8	-132.2
Government purchases of goods & services	726.9	754.5	771.7	759.6	766.7	771.7	788.9	768.3
GDP implicit price deflator								
% change	3.2	2.6	3.0	4.2	3.5	2.8	2.7	2.4
Disposable personal income (\$ bil)	2,841.1	3,022.1	3,181.7	3,125.9	3,130.6	3,195.3	3,275.0	3,320.2
Disposable per. income (1982 \$ bil)	2,542.2	2,645.1	2,677.2	2,674.6	2,645.5	2,674.7	2,713.8	2,735.4
Per capita disposable per. income (\$)	11,872	12,508	13,050	12,865	12,858	13,090	13,384	13,536
Per capita dis. per. income (1982 \$)	10,622	10,947	10,980	11,008	10,865	10,958	11,090	11,151
U.S. population, total, incl. military abroad (mil)	239.3	241.6	243.9	243.1	243.6	244.2	244.8	245.4
Civilian population (mil)	237.0	239.4	241.7	240.8	241.4	242.0	242.6	243.1
	Annual			1987		1988		
	1985	1986	1987	Mar	Dec	Jan	Feb	Mar
Monthly data seasonally adjusted								
Industrial production (1977=100)	123.7	125.1	129.8	127.4	133.9	134.4	134.4	134.6
Leading economic indicators (1967=100)	168.6	179.3	189.9	187.6	190.6	189.2	191.7	193.3
Civilian employment (mil. persons)	107.2	109.6	112.4	111.5	113.7	114.1	114.4	114.1
Civilian unemployment rate (%)	7.2	7.0	6.2	6.5	5.8	5.8	5.7	5.6
Personal income (\$ bil annual rate)	3,327.0	3,534.3	3,746.5	3,683.4	3,869.1	3,872.5	3,894.7	3,924.3
Money stock-M2 (daily avg) (\$ bil) 1/	2,562.6	2,807.8	2,901.0	2,834.3	2,901.0	2,924.9	2,946.1	2,967.8
Three-month Treasury bill rate (%)	7.48	5.98	5.82	5.56	5.80	5.90	5.69	5.69
Aaa corporate bond yield (Moody's) (%)	11.37	9.02	9.38	8.36	10.11	9.88	9.40	9.39
Housing starts (thou) 2/	1,742	1,805	1,621	1,723	1,399	1,382	1,514	1,543
Auto sales at retail, total (mil)	11.0	11.4	10.3	10.3	10.9	10.4	11.0	10.7
Business inventory/sales ratio	1.55	1.54	1.51	1.50	1.52	1.54	1.53	NA
Sales of all retail stores (\$ bil)	115.0	121.2	125.5	124.1	127.5	128.8	129.6 P	130.7
Nondurable goods stores (\$ bil)	71.8	73.9	76.9	78.3	77.6	80.1	79.9 P	80.8
Food stores (\$ bil)	23.7	24.6	25.3	26.0	25.2	26.2	26.3 P	26.6
Eating & drinking places (\$ bil)	11.1	12.1	12.7	12.1	13.0	12.5	12.6 P	12.5
Apparel & accessory stores (\$ bil)	6.2	6.7	7.1	6.7	7.2	6.5	6.5 P	6.5

1/ Annual data as of December of the year listed. 2/ Private, including farm. P = preliminary. NA = not available

Information contact: James Malley (202) 786-1782.

Table 3.—Foreign Economic Growth, Inflation, &amp; Export Earnings

	Average 1970-74	Average 1975-79	1980	1981	1982	1983	1984	1985	1986	1987	1988 P
Annual percent change											
Total foreign											
Real GNP	5.5	3.7	2.6	1.6	1.7	2.0	3.2	3.0	2.7	2.9	2.7
CPI	10.2	14.0	16.9	15.6	14.4	18.4	22.5	21.6	11.4	16.6	25.2
Export earnings	27.5	14.6	22.2	-2.7	-7.0	-2.6	5.5	1.8	12.0	12.9	11.4
Developed less U.S.											
Real GNP	4.8	3.1	2.4	1.4	1.1	1.9	3.4	3.3	2.4	2.6	2.4
CPI	8.4	9.4	10.9	9.6	8.0	6.0	5.1	4.7	2.7	2.6	2.8
Export earnings	23.9	14.9	17.0	-3.3	-4.3	-0.5	6.2	4.9	19.2	17.1	12.9
Centrally planned											
Real GNP	5.1	3.5	1.5	2.1	2.7	3.4	3.7	2.9	3.9	3.5	3.8
Export earnings	19.4	16.1	16.5	3.4	6.0	8.2	1.5	-5.1	7.3	6.7	7.7
Latin America											
Real GNP	7.4	5.1	5.3	0.7	-0.5	-2.7	3.3	3.6	3.7	2.3	1.2
CPI	23.5	53.7	61.3	64.9	72.6	126.2	174.1	179.4	86.1	139.1	231.5
Export earnings	28.1	12.8	30.1	5.3	-10.0	-0.9	6.0	-6.2	-14.1	9.7	5.2
Africa & Middle East											
Real GNP	8.9	6.4	1.3	0.0	1.4	0.1	1.1	0.0	-1.2	0.1	1.7
CPI	8.7	16.4	24.6	17.3	12.9	16.7	19.4	11.2	12.0	14.9	12.7
Export earnings	49.6	43.2	37.9	-9.2	-19.7	-17.3	-7.6	-7.8	-12.2	9.6	10.3
Asia											
Real GNP	6.0	6.8	6.3	6.6	3.6	6.6	5.4	4.0	5.8	6.0	5.2
CPI	13.0	8.4	16.4	14.1	7.3	7.7	8.5	5.2	4.4	5.7	6.1
Export earnings	30.1	19.4	27.8	6.8	-0.3	3.4	13.7	-1.2	6.9	20.7	13.3

P = preliminary.

Information contact: Timothy Baxter (202) 786-1790

## Farm Prices

Table 4.—Indexes of Prices Received &amp; Paid by Farmers, U.S. Average

	Annual			1987			1988			
	1985	1986	1987	Apr	Nov	Dec	Jan	Feb	Mar R	Apr P
	1977=100									
Prices received										
All farm products	128	123	127	125	132	127	131	130	130	130
All crops	120	107	106	101	120	113	115	109	110	111
Food grains	133	109	102	103	113	114	116	120	118	120
Feed grains & hay	122	98	85	84	88	92	93	96	97	98
Feed grains	122	96	81	79	84	89	90	93	94	93
Cotton	93	91	98	83	107	106	100	94	95	95
Tobacco	153	138	130	126	137	137	134	134	134	131
Oil-bearing crops	84	77	79	77	83	86	87	89	91	94
Fruit, all	180	169	181	153	236	170	170	166	163	159
Fresh market 1/	192	177	191	158	259	178	178	174	170	169
Commercial vegetables	129	130	144	136	203	177	189	129	136	130
Fresh market	122	123	147	136	225	195	223	127	136	128
Potatoes & dry beans	124	114	127	139	93	89	93	94	102	109
Livestock & products	136	138	146	147	143	141	147	149	148	148
Meat animals	142	145	163	165	157	157	166	172	171	172
Dairy products	131	129	129	127	133	131	129	127	123	121
Poultry & eggs	119	128	108	112	105	98	101	95	101	98
Prices paid										
Commodities & services										
Interest, taxes, & wage rates	163	159	162	162	--	--	165	--	--	168
Production items	151	144	147	147	--	--	152	--	--	155
Feed	116	108	103	101	--	--	112	--	--	112
Feeder livestock	154	153	179	179	--	--	193	--	--	198
Seed	153	148	148	149	--	--	149	--	--	150
Fertilizer	135	124	118	117	--	--	121	--	--	132
Agricultural chemicals	128	127	124	123	--	--	123	--	--	128
Fuels & energy	201	162	161	158	--	--	161	--	--	163
Farm & motor supplies	146	144	144	145	--	--	144	--	--	146
Autos & trucks	193	198	208	210	--	--	213	--	--	215
Tractors & self-propelled machinery	178	174	174	174	--	--	176	--	--	179
Other machinery	183	184	185	186	--	--	188	--	--	200
Building & fencing	136	136	137	136	--	--	138	--	--	138
Farm services & cash rent	150	150	146	146	--	--	150	--	--	150
Interest payable per acre on farm real estate debt	237	219	207	207	--	--	193	--	--	193
Taxes payable per acre on farm real estate	133	134	136	136	--	--	138	--	--	138
Wage rates (seasonally adjusted)	154	160	167	171	--	--	162	--	--	162
Production items, interest, taxes, & wage rates	157	150	152	152	--	--	155	--	--	158
Ratio, prices received to prices paid 2/	79	77	78	77	80	77	79	79	79	77
Prices received (1910-14=100)	585	561	578	569	601	582	599	592	593	593
Prices paid, etc. (Parity index) (1910-14=100)	1,120	1,086	1,115	1,114	--	--	1,138	--	--	1,154
Parity ratio (1910-14=100) 2/	52	51	52	51	53	51	53	--	--	51

1/ Fresh market for noncitrus; fresh market and processing for citrus. 2/ Ratio of index of prices received for all farm products to index of prices paid for commodities and services, interest, taxes, and wage rates. Ratio derived using the most recent prices paid index. Prices paid data will be published in January, April, July, and October. R = revised. P = preliminary.

Table 5.—Prices Received by Farmers, U.S. Average

	Annual 1/			1987			1988			
	1985	1986	1987	Apr	Nov	Dec	Jan	Feb	Mar R	Apr P
<b>Crops</b>										
All wheat (\$/bu)	3.20	2.71	2.55	2.63	2.69	2.70	2.75	2.79	2.74	2.81
Rice, rough (\$/cwt)	7.85	5.04	4.49	3.63	7.09	7.37	7.70	8.97	8.79	8.41
Corn (\$/bu)	2.49	1.96	1.56	1.52	1.62	1.72	1.77	1.83	1.86	1.85
Sorghum (\$/cwt) 1	3.97	3.11	2.56	2.58	2.69	2.73	2.75	2.88	2.92	2.84
All hay, baled (\$/ton)	69.90	61.60	63.00	64.10	62.10	65.00	62.80	65.50	66.20	72.90
Soybeans (\$/bu)	5.42	5.00	5.07	4.90	5.36	5.63	5.73	5.97	6.06	6.36
Cotton, Upland (cts/lb)	55.1	54.8	59.4	50.4	64.9	64.2	60.6	56.8	57.7	57.3
Potatoes (\$/cwt)	3.92	5.03	4.47	5.66	3.59	3.57	3.75	3.73	4.00	4.30
Lettuce (\$/cwt)	10.90	11.90	14.80	8.43	42.20	34.80	35.60	11.10	13.80	7.56
Tomatoes (\$/cwt)	24.10	25.10	25.10	26.90	45.80	22.60	31.50	19.40	28.60	29.90
Onions (\$/cwt)	8.08	10.90	11.40	26.30	8.82	10.10	15.30	13.80	12.50	15.80
Dry edible beans (\$/cwt)	17.60	19.01	15.50	18.90	14.00	13.10	13.40	14.40	16.30	16.90
Apples for fresh use (cts/lb)	17.3	19.1	NA	19.1	12.5	11.8	11.5	12.8	12.8	11.1
Pears for fresh use (\$/ton)	349.00	372.00	217.00	325.00	211.00	147.00	135.00	193.00	219.00	229.00
Oranges, all uses (\$/box) 2/	7.41	4.42	4.55	5.15	10.23	5.45	6.19	6.24	5.99	6.42
Grapefruit, all uses (\$/box) 2/	4.01	4.29	5.00	1.85	6.81	5.84	5.34	5.25	4.86	4.50
<b>Livestock</b>										
Beef cattle (\$/cwt)	54.00	52.80	61.40	62.60	62.00	62.20	65.40	67.40	68.30	68.90
Calves (\$/cwt)	62.40	60.90	78.10	75.10	82.90	83.10	86.20	92.60	93.50	95.20
Hogs (\$/cwt)	43.90	50.10	50.90	50.80	40.60	40.30	43.00	45.80	42.20	41.80
Lambs (\$/cwt)	68.10	69.10	77.90	86.10	65.70	72.80	80.70	80.40	80.20	74.00
All milk, sold to plants (\$/cwt)	12.70	12.50	12.50	12.20	12.90	12.70	12.50	12.30	11.90	11.70
Milk, manuf. grade (\$/cwt)	11.78	11.55	11.40	11.20	11.70	11.60	11.30	11.00	10.70	10.60
Broilers (cts/lb)	30.1	34.5	28.5	29.2	26.4	24.6	27.1	25.7	27.5	28.0
Eggs (cts/doz) 3/	57.4	61.2	53.8	54.8	55.2	48.6	49.3	46.9	50.8	45.5
Turkeys (cts/lb)	47.2	44.4	34.2	36.3	33.7	38.1	31.8	29.0	28.2	28.4
Wool (cts/lb) 4/	63.3	66.8	91.7	99.7	86.5	86.2	75.2	93.3	118.0	153.0

1/ Calendar year averages, except for potatoes, dry edible beans, apples, oranges, and grapefruit, which are crop years.  
 2/ Equivalent on-tree returns. 3/ Average of all eggs sold by producers including hatching eggs and eggs sold at retail.  
 4/ Average local market price, excluding incentive payments. R = revised. P = preliminary. NA = not available.

Information Contact: National Agricultural Statistics Service (202) 447-5446.

## Producer and Consumer Prices

Table 6.—Consumer Price Index for All Urban Consumers, U.S. Average (Not Seasonally Adjusted)

	Annual	1987						1988		
	1987	Mar	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar
		1982-84=100								
Consumer price index, all items	113.6	112.1	114.4	115.0	115.3	115.4	115.4	115.7	116.0	116.5
Consumer price index, less food	113.6	112.0	114.5	115.1	115.5	115.7	115.5	115.7	116.0	116.6
All food	113.5	112.5	113.8	114.1	114.3	114.2	114.7	115.7	115.7	115.9
Food away from home	117.0	115.9	117.5	118.0	118.3	118.6	118.9	119.3	119.7	120.2
Food at home	111.9	110.9	112.1	112.4	112.4	112.1	112.8	114.1	113.9	113.9
Meats 1/	109.6	106.7	112.1	112.0	111.8	111.1	110.4	110.1	110.2	110.9
Beef & veal	106.3	102.9	107.8	107.4	107.8	108.6	108.5	107.7	108.5	109.8
Pork	115.9	112.4	120.7	121.1	119.0	115.5	113.1	113.4	112.3	112.6
Poultry	112.6	114.9	112.9	112.5	111.8	107.9	107.8	108.9	108.4	109.1
Fish	129.9	129.1	130.8	132.0	131.4	132.3	133.3	137.2	137.0	136.0
Eggs	91.5	93.9	85.8	97.6	91.4	93.9	85.5	90.1	85.5	87.9
Dairy products 2/	105.9	105.4	105.7	106.4	106.9	106.9	106.7	107.4	107.3	107.2
Fats & oils 3/	108.1	109.0	108.3	107.8	107.4	108.0	107.7	108.5	109.5	110.3
Fresh fruit	132.0	129.8	131.8	131.7	135.7	125.8	126.3	130.7	132.6	133.8
Processed fruit	110.6	109.0	111.8	112.1	111.5	111.6	112.3	115.1	118.0	119.4
Fresh vegetables	121.6	118.9	114.5	114.6	112.5	121.2	140.2	143.9	133.7	125.6
Potatoes	116.0	111.2	127.6	110.5	101.9	100.6	103.8	104.6	106.2	108.5
Processed vegetables	107.1	107.5	107.9	107.6	107.5	107.3	107.3	107.2	107.6	107.9
Cereals & bakery products	114.8	113.4	115.3	115.4	115.6	116.2	116.8	118.1	118.7	118.9
Sugar & sweets	111.0	110.7	111.3	111.6	111.6	111.4	111.0	112.2	112.2	112.6
Beverages, nonalcoholic	107.5	109.8	105.9	105.8	106.7	105.0	104.8	106.9	107.7	107.7
Apparel commodities less footwear	109.6	108.7	108.3	112.9	115.2	115.0	111.7	109.0	108.8	113.7
Footwear	105.1	104.5	104.2	105.7	107.3	108.0	107.2	106.1	105.8	107.3
Tobacco & smoking products	133.6	131.3	135.3	135.9	136.3	136.5	137.0	140.8	142.2	142.8
Beverages, alcoholic	114.1	112.9	114.7	114.9	115.2	115.4	115.4	115.8	116.8	117.4

1/ Beef, veal, lamb, pork, and processed meat. 2/ Includes butter. 3/ Excludes butter.

Information Contact: Ralph Parlett (202) 786-1870.



Table 7.—Producer Price Indexes, U.S. Average (Not Seasonally Adjusted)

	Annual			1987				1988		
	1985	1986	1987 P	Mar	Oct	Nov	Dec	Jan	Feb	Mar
	1982=100									
Finished goods 1/	104.7	103.2	105.4	104.3	106.2	106.3	105.7	106.2	105.9	106.2
Consumer foods	104.6	107.2	109.5	108.1	109.7	109.8	108.8	110.6	109.4	110.0
Fresh fruit	108.1	112.9	111.4	113.1	115.2	123.4	118.6	106.6	104.2	104.2
Fresh & dried vegetables	99.4	97.8	103.8	105.5	91.7	125.7	109.6	126.3	96.4	96.3
Dried fruit	88.7	91.9	95.0	94.1	94.6	98.0	99.0	99.1	97.8	97.8
Canned fruit & juice	113.8	111.0	115.4	114.1	116.4	116.5	117.2	119.1	119.4	119.5
Frozen fruit & juice	118.5	103.0	113.4	110.2	113.0	117.0	126.6	126.0	130.2	131.1
Fresh veg. excl. potatoes	100.3	99.3	99.0	103.9	89.6	135.4	112.0	135.9	96.8	94.2
Canned veg. & juices	101.9	101.2	103.5	104.8	102.9	102.3	102.6	103.1	103.3	103.6
Frozen vegetables	106.5	106.6	107.3	107.4	107.2	106.6	106.7	106.8	106.5	107.2
Potatoes	101.2	104.0	120.5	120.5	106.8	108.1	114.2	107.5	100.2	108.0
Eggs	95.6	99.5	87.6	89.7	81.1	92.6	70.6	76.5	73.8	79.7
Bakery products	113.9	116.6	118.5	116.9	120.0	120.4	121.3	122.5	122.8	123.1
Meats	90.9	93.9	100.3	93.7	102.1	96.1	93.2	98.0	97.6	98.4
Beef & veal	90.3	88.1	95.4	91.5	95.0	92.4	92.5	96.1	96.3	100.9
Pork	89.1	99.9	104.7	90.9	110.0	95.8	87.1	97.3	95.7	91.5
Processed poultry	110.4	116.7	103.5	106.7	97.5	98.4	96.3	98.2	93.8	98.7
Fish	114.6	124.9	141.9	140.0	148.2	145.4	156.3	159.2	158.2	160.1
Dairy products	100.2	99.9	101.7	101.4	102.1	102.0	101.8	101.1	100.4	100.0
Processed fruits & vegetables	107.9	104.9	108.6	108.4	108.4	108.8	110.4	111.0	111.5	111.9
Shortening & cooking oils	123.9	103.3	104.0	101.8	105.3	106.3	109.1	116.2	114.4	114.7
Consumer finished goods less foods	103.3	98.4	100.6	99.5	101.9	101.9	101.4	101.3	101.3	101.4
Beverages, alcoholic	107.6	110.1	110.4	110.9	110.1	110.1	110.3	110.4	111.3	112.2
Soft drinks	107.7	109.5	111.9	111.3	112.8	112.8	112.6	112.9	113.3	113.9
Apparel	105.0	106.3	108.4	107.6	109.3	109.3	109.5	110.1	110.4	110.7
Footwear	104.7	106.8	109.4	108.4	110.9	110.6	111.7	112.7	114.2	114.3
Tobacco products	132.5	142.4	154.7	150.8	157.5	157.6	163.3	166.3	166.5	166.5
Intermediate materials 2/	102.6	99.1	101.5	99.6	103.1	103.4	103.7	104.2	104.1	104.6
Materials for food manufacturing	101.4	98.4	100.7	98.2	101.9	100.6	99.8	102.0	101.9	101.7
Flour	99.8	94.5	92.9	92.4	94.5	93.3	93.3	94.3	97.5	94.1
Refined sugar 3/	102.8	103.2	106.5	105.1	107.1	107.1	106.8	106.5	106.7	106.7
Crude vegetable oils	137.5	84.8	84.0	81.9	86.6	91.6	92.9	105.0	105.9	101.2
Crude materials 4/	95.8	87.7	93.6	90.3	95.3	94.7	94.3	93.4	94.6	94.1
Foodstuffs & feedstuffs	94.8	93.2	96.2	92.7	96.1	95.3	95.8	96.9	99.6	99.7
fruits & vegetables 5/	102.6	103.9	106.6	108.3	101.5	124.1	113.0	117.0	99.3	99.3
Grains	96.1	79.2	71.1	67.5	72.8	74.9	78.9	77.5	83.5	80.6
Livestock	89.1	91.8	101.9	96.0	102.6	96.8	97.5	98.7	105.0	105.7
Poultry, live	117.8	129.6	101.2	104.0	88.5	93.9	87.7	96.6	86.9	96.9
Fibers, plant & animal	97.4	88.3	106.5	89.9	108.9	105.1	100.5	100.7	97.8	103.2
Fluid milk	93.6	90.9	91.9	92.2	93.2	93.1	91.5	90.5	89.1	86.7
Oilseeds	94.4	91.4	99.3	93.2	97.2	100.7	106.5	110.0	111.1	112.6
Tobacco, leaf	101.2	89.7	85.8	85.3	89.2	88.5	88.5	87.2	87.2	87.2
Sugar, raw cane	104.6	104.9	110.3	109.9	110.6	110.1	109.8	109.7	111.4	111.4
All commodities	103.1	100.1	102.8	101.2	104.1	104.2	104.1	104.5	104.6	104.9
Industrial commodities	103.7	99.9	102.6	101.1	104.0	104.2	104.1	104.3	104.4	104.7
All foods 6/	103.9	105.5	107.8	106.2	108.1	108.4	107.4	109.3	108.1	108.6
Farm products 6										
Processed foods & feeds	100.6	101.2	103.7	101.3	104.1	104.1	103.9	105.3	105.2	105.7
Farm products	95.1	92.9	95.4	92.2	94.9	96.3	95.4	96.8	97.5	87.7
Processed foods & feeds 6/	103.5	105.4	107.9	105.9	108.7	108.1	108.2	109.5	109.2	109.7
Cereal & bakery products	110.2	111.0	112.6	111.2	114.5	115.3	116.6	118.5	119.6	119.6
Sugar & confectionery	107.9	109.6	112.7	111.2	113.6	113.5	113.0	112.8	112.9	113.2
Beverages	107.7	114.5	112.5	112.9	112.3	112.0	112.2	112.4	112.9	113.8

1/ Commodities ready for sale to ultimate consumer. 2/ Commodities requiring further processing to become finished goods. 3/ All types and sizes of refined sugar. 4/ Products entering market for the first time which have not been manufactured at that point. 5/ Fresh and dried. 6/ Includes all raw, intermediate, and processed foods (excludes soft drinks, alcoholic beverages, and manufactured animal feeds). P = preliminary.

Information contact: Bureau of Labor Statistics (202) 523-1913.

# Farm-Retail Price Spreads

Table 8.—Farm-Retail Price Spreads

	Annual				1987				1988		
	1984	1985	1986	1987	Mar	Oct	Nov	Dec	Jan	Feb	Mar
<b>Market basket 1/</b>											
Retail cost (1967=100)	279.3	282.6	288.7	303.1	298.9	305.7	305.1	306.5	309.2	308.0	308.0
Farm value (1967=100)	255.4	237.2	234.1	240.4	236.4	235.6	237.2	231.8	233.2	234.1	234.8
Farm-retail spread (1967=100)	293.3	309.3	320.8	340.0	335.6	346.9	345.1	350.4	353.9	351.4	351.0
Farm value-retail cost (%)	33.9	31.1	30.0	29.4	29.3	28.5	28.8	28.0	27.9	28.2	28.2
<b>Meat products</b>											
Retail cost (1967=100)	268.1	265.5	273.9	294.2	286.1	300.2	298.4	295.4	295.5	294.3	296.1
Farm value (1967=100)	241.5	221.8	229.1	245.9	232.4	248.2	231.3	227.0	227.5	242.3	244.2
Farm-retail spread (1967=100)	299.1	316.6	326.2	350.7	349.0	361.1	377.0	377.7	375.2	354.6	356.9
Farm value-retail cost (%)	48.6	45.1	45.1	45.1	43.8	44.6	41.8	41.3	41.5	44.3	44.5
<b>Dairy products</b>											
Retail cost (1967=100)	253.2	258.0	258.4	264.6	263.2	267.2	267.2	266.8	268.7	268.4	268.4
Farm value (1967=100)	258.8	248.2	241.5	244.2	245.5	247.3	244.9	241.8	242.6	238.0	234.9
Farm-retail spread (1967=100)	248.3	266.5	273.3	282.5	278.7	284.7	286.8	288.7	291.6	295.1	297.2
Farm value-retail cost (%)	47.8	45.0	43.7	43.2	43.6	43.3	42.9	42.4	42.2	41.5	41.0
<b>Poultry</b>											
Retail cost (1967=100)	218.5	216.4	232.7	229.3	234.1	227.8	219.8	219.7	221.9	220.8	222.1
Farm value (1967=100)	249.9	234.9	255.4	206.5	214.6	182.0	194.1	190.6	196.3	184.9	195.1
Farm-retail spread (1967=100)	188.1	198.4	210.9	251.4	253.0	272.1	244.6	247.9	246.7	255.8	248.2
Farm value-retail cost (%)	56.3	53.4	54.0	44.3	45.1	39.3	43.4	42.7	43.5	41.2	43.2
<b>Eggs</b>											
Retail cost (1967=100)	209.0	174.3	186.3	175.5	180.3	175.1	179.9	163.8	172.6	163.8	168.4
Farm value (1967=100)	230.3	178.9	192.7	160.2	164.9	148.2	168.0	139.2	142.3	134.6	147.5
Farm-retail spread (1967=100)	178.2	167.6	177.1	197.7	202.6	213.9	197.0	199.4	216.3	205.9	198.7
Farm value-retail cost (%)	65.1	60.7	61.1	53.9	54.0	60.0	55.2	50.2	48.7	48.6	51.8
<b>Cereal &amp; bakery products</b>											
Retail cost (1967=100)	305.3	317.0	325.8	336.9	332.9	339.5	341.2	343.2	347.0	348.7	349.4
Farm value (1967=100)	192.0	175.9	142.3	131.3	131.5	134.6	142.0	138.9	143.7	154.6	145.2
Farm-retail spread (1967=100)	328.7	346.2	363.7	379.5	374.6	381.9	382.4	385.5	389.1	388.9	391.7
Farm value-retail cost (%)	10.8	9.5	7.5	6.7	6.8	6.8	7.1	6.9	7.1	7.6	7.1
<b>Fresh fruits</b>											
Retail cost (1967=100)	345.3	383.5	390.1	414.0	429.2	466.9	430.5	416.4	429.2	429.6	434.3
Farm value (1967=100)	315.1	302.7	285.3	290.3	282.5	293.4	326.6	304.3	264.9	250.1	258.1
Farm-retail spread (1967=100)	358.9	419.8	437.1	513.0	495.1	544.8	477.2	466.7	503.0	510.2	513.4
Farm value-retail cost (%)	28.3	24.4	22.7	20.3	20.4	19.5	23.5	22.6	19.1	18.0	18.4
<b>Fresh vegetables</b>											
Retail cost (1967=100)	331.8	317.5	330.3	372.0	363.6	345.0	371.8	430.0	441.2	409.9	384.9
Farm value (1967=100)	298.7	256.7	248.1	309.4	298.8	237.5	401.2	361.8	359.4	294.0	285.2
Farm-retail spread (1967=100)	347.4	346.1	369.0	401.3	394.1	395.6	358.0	462.3	479.6	467.1	431.8
Farm value-retail cost (%)	28.8	25.9	24.0	26.6	26.3	22.0	34.5	26.9	26.0	22.9	23.7
<b>Processed fruits &amp; vegetables</b>											
Retail cost (1967=100)	306.1	314.1	309.1	319.6	317.9	322.0	321.8	323.1	327.9	333.1	335.8
Farm value (1967=100)	343.5	378.5	326.3	354.4	367.8	335.3	331.8	375.4	381.8	367.5	386.7
Farm-retail spread (1967=100)	297.8	299.9	305.3	311.9	306.9	319.0	318.2	311.5	316.0	321.1	324.5
Farm value-retail cost (%)	20.3	21.8	19.1	20.1	21.0	18.9	19.0	21.1	21.1	21.1	20.9
<b>Fats &amp; oils</b>											
Retail cost (1967=100)	288.0	294.4	287.8	291.9	293.9	290.1	291.8	291.0	293.0	295.6	297.7
Farm value (1967=100)	324.8	271.3	199.1	192.8	192.5	194.5	195.9	204.1	243.6	240.7	238.5
Farm-retail spread (1967=100)	273.8	303.3	321.8	390.0	332.9	326.9	328.7	324.4	312.0	316.7	320.4
Farm value-retail cost (%)	31.3	25.6	19.4	18.4	18.2	19.6	18.6	19.5	23.1	22.6	22.3

	Annual				1987				1988		
	1984	1985	1986	1987	Mar	Oct	Nov	Dec	Jan	Feb	Mar
<b>Beef, Choice</b>											
Retail price 2/ (cts/lb)	239.6	232.6	230.7	242.5	233.6	245.7	246.6	245.3	242.9	246.3	248.5
Net carcass value 3/ (cts)	147.6	135.2	133.1	145.3	139.5	144.6	142.4	141.1	144.7	148.3	154.0
Net farm value 4/ (cts)	140.0	126.8	124.4	137.9	133.4	137.1	136.1	134.6	136.6	143.2	148.6
Farm-retail spread (cts)	99.6	105.8	106.3	104.6	100.2	108.6	110.5	110.7	106.3	103.1	99.9
Carcass-retail spread 5/ (cts)	92.0	97.4	97.6	97.2	94.1	101.1	104.2	104.2	98.2	98.0	94.5
Farm-carcass spread 6/ (cts)	7.6	8.4	8.7	7.4	6.1	7.5	6.3	6.5	8.1	5.1	5.5
Farm value-retail price (%)	58	55	54	57	57	56	55	55	56	58	60
<b>Pork</b>											
Retail price 2/ (cts/lb)	162.0	162.0	178.4	188.4	181.3	194.4	189.2	185.6	185.3	183.1	183.3
Wholesale value 3/ (cts)	110.1	101.1	110.9	113.0	102.2	112.7	103.1	106.5	104.0	105.3	103.5
Net farm value 4/ (cts)	77.4	71.4	82.4	82.7	76.8	77.8	65.0	66.2	71.3	75.5	68.6
Farm-retail spread (cts)	84.6	90.6	96.0	105.7	104.5	116.6	124.2	119.4	114.0	107.6	114.7
Wholesale-retail spread 5/ (cts)	51.8	60.9	67.5	75.4	79.1	81.7	86.1	79.1	81.3	77.8	79.8
Farm-wholesale spread 6/ (cts)	32.7	28.7	28.5	30.3	25.4	34.9	38.1	40.3	32.7	29.8	34.9
Farm value-retail price (%)	48	44	46	44	42	40	34	36	38	41	37

1/ Retail costs are based on indexes of retail prices for domestically produced farm foods from the CPI-U published monthly by the Bureau of Labor Statistics. The farm value is the payment to farmers for quantity of farm product equivalent to retail unit, less allowance for byproduct. Farm values are based on prices at first point of sale and may include marketing charges such as grading and packing for some commodities. The farm-retail spread, the difference between the retail price and the farm value, represents charges for assembling, processing, transporting, and distributing these foods. 2/ Estimated weighted average price of retail cuts from pork and choice yield grade 3 beef carcasses. Retail cut prices from BLS. 3/ Value of carcass quantity (beef) and wholesale cuts (pork) equivalent to 1 lb of retail cuts; beef adjusted for value of fat and bone byproducts. 4/ Market value to producer for quantity of live animal equivalent to 1 lb. of retail cuts minus value of byproduct. 5/ Represents charges for retailing and other marketing services such as fabricating, wholesaling, and in-city transportation. 6/ Represents charges made for livestock marketing, processing, and transportation to city where consumed.

Note: Annual historical data on farm-retail price spreads may be found in Food Consumption, Prices and Expenditures, Statistical Bulletin 749, ERS, USDA.

Information contacts: Denis Dunham (202) 786-1870; Ron Gustafson (202) 786-1286.

Table 9.—Price Indexes of Food Marketing Costs

	Annual			1986	1987				1988
	1985	1986	1987	IV	I	II	III	IV P	I P
1967=100									
Labor-hourly earnings and benefits	363.0	359.8	367.7	359.1	366.5	366.7	366.2	368.3	371.0
Processing	357.9	365.8	377.4	366.8	375.3	376.4	373.3	377.1	381.0
Wholesaling	382.7	373.0	393.4	376.6	392.1	391.6	393.5	396.4	399.8
Retailing	364.1	348.0	346.6	343.7	346.5	346.0	347.0	347.0	348.2
Packaging & containers	312.1	317.4	329.8	320.6	325.0	328.1	330.6	335.8	341.0
Paperboard boxes & containers	271.6	269.1	288.0	273.7	281.5	285.5	288.8	296.5	299.1
Metal cans	416.9	430.1	433.0	430.2	431.3	433.5	433.5	433.5	443.9
Paper bags & related products	294.7	307.9	331.3	316.7	322.4	328.8	333.4	342.4	351.1
Plastic films & bottles	274.4	274.8	280.2	274.7	277.2	278.0	280.1	284.7	288.3
Glass containers	380.0	398.0	402.0	400.5	402.5	403.3	401.4	400.1	400.0
Metal foil	213.8	209.3	222.1	210.3	210.2	213.1	226.3	241.2	249.0
Transportation services	393.9	391.7	385.0	386.4	384.1	385.3	385.4	385.3	399.6
Advertising	320.2	339.7	361.1	345.6	354.9	359.0	363.2	367.4	377.3
Fuel & power	700.0	590.2	596.7	562.5	581.7	592.4	612.2	602.4	575.7
Electric	453.5	457.9	450.5	448.7	440.9	448.6	465.5	444.7	440.3
Petroleum	821.5	499.8	561.4	446.2	520.5	541.3	582.5	601.4	526.7
Natural gas	1,158.2	1,096.9	1,049.0	1,062.1	1,061.2	1,064.7	1,057.2	1,027.6	1,021.3
Communications, water & sewage	224.9	236.1	238.4	238.3	236.9	237.7	239.7	239.5	239.9
Rent	268.3	273.8	279.4	275.9	276.2	279.2	280.6	281.2	283.2
Maintenance & repair	360.3	368.5	382.6	373.5	377.5	379.7	385.1	387.9	391.2
Business services	321.9	334.1	346.1	338.5	341.8	345.3	346.8	350.6	353.7
Supplies	287.9	282.8	286.8	281.0	283.6	286.2	287.1	290.2	294.9
Property taxes & insurance	362.0	382.3	399.6	389.0	392.6	397.3	401.2	408.3	412.8
Interest, short-term	157.2	125.1	132.9	112.1	116.4	134.0	137.5	143.5	131.4
Total marketing cost index	358.6	355.0	363.2	354.3	359.9	362.0	363.8	366.0	369.1

\* Indexes measure changes in employee earnings and benefits and in prices of supplies and services used in processing, wholesaling, and retailing U.S. farm foods purchased for at-home consumption. P = preliminary.

Information contact: Denis Dunham (202) 786-1870.



# Livestock and Products

Table 10.—U.S. Meat Supply & Use

Item	Beg. stocks	Pro- duc- tion 1/	Im- ports	Total supply	Ex- ports	Ship- ments	Ending stocks	Civilian consumption		Primary market price 3/
								Total	Per capita 2/	
Million Pounds 4/										
Beef										
1985	472	23,728	2,071	26,271	328	51	420	25,473	78.8	58.37
1986	420	24,371	2,129	26,919	521	52	412	25,935	78.4	57.75
1987	412	23,566	2,269	26,243	604	52	386	25,201	75.5	64.60
1988 F	386	22,907	2,300	25,593	530	60	435	24,568	72.9	64-70
Pork										
1985	348	14,807	1,128	16,283	128	131	289	15,734	61.9	44.77
1986	289	14,063	1,122	15,474	86	132	248	15,008	58.6	51.19
1987	248	14,374	1,195	15,817	109	124	347	15,237	59.2	51.69
1988 F	347	15,200	1,300	16,847	140	120	330	16,257	62.1	42-48
Veal										
1985	14	515	20	549	4	5	11	533	1.8	62.42
1986	11	524	27	562	5	5	7	549	1.9	60.89
1987	7	429	24	460	7	1	4	448	1.5	78.05
1988 F	4	410	27	441	5	1	5	430	1.5	85-91
Lamb and mutton										
1985	7	358	36	401	1	2	13	385	1.4	68.61
1986	13	338	41	392	2	2	13	375	1.4	70.26
1987	13	315	44	372	1	2	8	360	1.3	76.08
1988 F	8	332	53	393	2	1	9	381	1.4	73-79
Total red meat										
1985	841	39,408	3,255	43,504	461	165	733	42,125	144.0	NA
1986	733	39,296	3,319	43,349	613	187	679	41,868	140.2	NA
1987	680	38,684	3,533	42,897	722	179	745	41,251	137.5	NA
1988 F	745	38,849	3,680	43,274	657	202	779	41,636	137.9	NA
Broilers										
1985	20	13,762	0	13,781	417	143	27	13,195	55.2	50.8
1986	27	14,316	0	14,342	566	149	24	13,603	56.3	56.9
1987	24	15,594	0	15,618	752	151	25	14,691	60.3	47.4
1988 F	25	16,332	0	16,357	770	140	25	15,422	62.7	43-49
Mature chicken										
1985	119	636	0	755	21	1	144	589	2.5	NA
1986	144	627	0	771	16	3	163	589	2.4	NA
1987	163	650	0	814	15	2	188	608	2.5	NA
1988 F	188	678	0	866	30	4	160	672	2.7	NA
Turkeys										
1985	125	2,942	0	3,067	27	7	150	2,884	12.0	75.5
1986	150	3,271	0	3,422	27	5	178	3,212	13.3	72.2
1987	178	3,828	0	4,006	33	4	282	3,686	15.1	57.8
1988 F	282	4,226	0	4,508	43	4	250	4,211	17.1	49-55
Total poultry										
1985	264	17,340	0	17,604	465	151	321	16,668	69.7	NA
1986	321	18,216	0	18,535	609	156	365	17,405	72.0	NA
1987	365	20,072	0	20,437	800	157	495	18,985	77.9	NA
1988 F	495	21,236	0	21,731	843	148	435	20,305	82.5	NA
Red meat & poultry										
1985	1,105	56,748	3,255	61,108	926	336	1,054	58,792	213.6	NA
1986	1,054	57,511	3,319	61,884	1,223	343	1,044	59,273	212.2	NA
1987	1,045	58,756	3,532	63,334	1,522	336	1,240	60,236	215.3	NA
1988 F	1,240	60,085	3,675	65,005	1,500	350	1,214	61,941	220.4	NA

1/ Total including farm production for red meats and federally inspected plus non-federally inspected for poultry. 2/ Retail weight basis. (The beef carcass-to-retail conversion factor was changed from .74 to .73 beginning in 1986.) 3/ Dollars per cwt for red meat; cents per pound for poultry. Beef: Choice steers, Omaha 1,000-1,100 lb.; pork: barrows and gilts, 7 markets; veal: farm price of calves; lamb and mutton: Choice slaughter lambs, San Angelo; broilers: wholesale 12-city average; turkeys: wholesale NY 8-16 lb. young hens. 4/ Carcass weight for red meats and certified ready-to-cook for poultry. F = forecast, NA = not available.

Information contacts: Ron Gustafson, Leland Southard, or Mark Weimar (202) 786-1285.

Table 11.—U.S. Egg Supply &amp; Use

	Beg. stocks	Pro-duction	Im-ports	Total supply	Ex-ports	Ship-ments	Hatch-ing use	Ending stocks	Consumption		Wholesale price <sup>a</sup>
									Total	Per capita	
									Million dozen		
1983	20.3	5,659.2	23.4	5,702.9	85.8	26.6	500.0	9.3	5,081.2	259.8	75.2
1984	9.3	5,708.3	32.0	5,749.5	58.2	27.8	529.7	11.1	5,122.8	259.4	80.9
1985	11.1	5,688.0	12.7	5,711.8	70.6	30.3	548.1	10.7	5,052.0	253.4	66.4
1986	10.7	5,705.0	13.7	5,729.3	101.6	28.0	566.8	10.4	5,022.5	249.5	71.1
1987	10.4	5,796.5	5.6	5,811.7	111.2	25.1	595.3	14.0	5,066.9	249.5	61.6
1988 F	14.4	5,762.6	4.0	5,781.0	125.0	24.0	615.3	10.0	5,006.8	244.2	56-62

<sup>a</sup> Cartoned Grade A large eggs, New York. F = forecast.

Information contact: Robert Bishop (202) 786-1714.

Table 12.—U.S. Milk Supply & Use<sup>1</sup>

Calendar year	Pro- duc- tion	Farm use	Commercial		Im- ports	Total commer- cial supply	CCC net re- movals	Commercial		All milk price 2/ cwt
			Farm market- ings	Beg stocks				Ending stocks	Disap- pear- ance	
Billion pounds										
1981	132.8	2.3	130.5	5.8	2.3	138.5	12.9	5.4	120.3	13.77
1982	135.5	2.4	133.1	5.4	2.5	141.0	14.3	4.6	122.1	13.61
1983	139.7	2.4	137.3	4.6	2.6	144.5	16.8	5.2	122.5	13.58
1984	135.4	2.9	132.5	5.2	2.7	140.5	8.6	4.9	126.9	13.46
1985	143.1	2.5	140.7	4.9	2.8	148.4	13.2	4.6	130.6	12.75
1986	143.4	2.6	140.8	4.6	2.7	148.1	10.6	4.2	133.4	12.51
1987	142.5	2.6	139.9	4.2	2.5	146.6	6.7	4.6	135.3	12.53
1988 F	146.0	2.5	143.5	4.6	2.6	150.6	8.0	4.7	137.9	11.80

<sup>1/</sup> Milkfat basis. Totals may not add because of rounding. <sup>2/</sup> Delivered to plants and dealers, does not reflect deductions. F = forecast.

Information contact: Jim Miller (202) 786-1770.

Table 13.—Poultry &amp; Eggs

	Annual			1987				1988		
	1985	1986	1987	Mar	Oct	Nov	Dec	Jan	Feb	Mar
<b>Broilers</b>										
Federally inspected slaughter, certified (mil lb)	13,569.2	14,265.6	15,498.1	1,298.2	1,380.9	1,177.1	1,336.8	1,306.1	1,289.7	1,388.3
Wholesale price, 12-city, (cts/lb)	50.8	56.9	47.4	48.5	43.2	44.6	39.8	43.9	44.9	48.1
Price of grower feed (\$/ton)	197	187	224	176	194	196	197	195	198	196
Broiler-feed price ratio 1/	3.1	3.7	3.7	3.3	2.6	2.7	2.5	2.8	2.6	2.8
Stocks beginning of period (mil lb)	19.7	26.6	30.7	23.5	28.3	27.3	24.1	24.8	31.0	32.4
Broiler-type chicks hatched (mil) 2/	4,803.8	5,013.3	535.1	456.1	441.9	423.1	469.7	464.5	431.7	482.8
<b>Turkeys</b>										
Federally inspected slaughter, certified (mil lb)	2,800	3,133	3,715	241.9	411.4	373.5	297.0	255.7	266.9	312.8
Wholesale price, Eastern U.S., 8-16 lb. young hens (cts/lb)	75.5	72.2	57.8	60.3	54.7	60.7	66.5	52.8	47.1	47.0
Price of turkey grower feed (\$/ton)	212	215	256	209	214	217	218	227	223	226
Turkey-feed price ratio 1/	4.5	4.1	3.9	3.6	2.8	3.1	3.5	2.8	2.6	2.5
Stocks beginning of period (mil lb)	125.3	150.2	437.2	211.4	640.8	629.9	321.5	282.4	299.3	335.1
Poults placed in U.S. (mil)	197.8	225.4	26.5	25.4	16.7	17.7	20.0	22.3	23.1	25.0
<b>Eggs</b>										
Farm production (mil)	68,256	68,459	6,955	6,020	5,931	5,803	6,016	5,980	5,607	5,964
Average number of layers (mil)	277	278	280	282	282	284	284	283	282	278
Rate of lay (eggs per layer on farms)	247	248	248	21.3	21.0	20.4	21.1	21.1	19.9	21.5
Cartoned price, New York, grade A large (cts/doz) 3/	66.4	71.1	61.6	62.0	60.2	60.5	56.9	55.9	52.7	56.4
Price of laying feed (\$/ton)	182	174	203	165	168	167	168	176	177	175
Egg-feed price ratio 1/	6.3	7.0	7.6	6.6	6.1	6.6	5.8	5.6	5.3	5.8
<b>Stocks, first of month</b>										
Shell (mil doz)	.93	.72	1.16	.75	.99	1.53	1.20	1.29	2.01	1.59
Frozen (mil doz)	10.2	10.0	14.5	10.2	12.5	13.6	13.2	13.1	13.9	13.9
Replacement chicks hatched (mil)	407	425	43.4	41.7	34.0	30.6	31.2	29.5	28.5	34.8

<sup>1/</sup> Pounds of feed equal in value to 1 dozen eggs or 1 lb. of broiler or turkey liveweight. <sup>2/</sup> Placement of broiler chicks is currently reported for 12 States only; henceforth, hatch of broiler-type chicks will be used as a substitute. <sup>3/</sup> Price of cartoned eggs to volume buyers for delivery to retailers.

Information contact: Mark Weimar (202) 786-1714.

Table 14.—Dairy

	Annual			1987				1988		
	1985	1986	1987	Mar	Oct	Nov	Dec	Jan	Feb	Mar
Milk prices Minnesota-Wisconsin, 3 5% fat (15/cwt) 1/	11.48	11.30	11.23	11.03	11.35	11.34	11.12	10.91	10.60	10.43
Wholesale prices										
Butter, Grade A Cnrl. (cts/lb)	141.1	144.5	140.2	137.8	136.8	135.6	134.0	131.9	131.0	131.0
Am cheese, wis. assembly pt. (cts/lb)	127.7	127.3	123.2	122.2	121.9	121.3	120.7	118.4	116.1	115.6
Nonfat dry milk (cts/lb) 2/	84.0	80.6	79.3	78.9	80.0	77.6	77.0	79.8	73.0	73.0
USDA net removals										
Total milk equiv. (mil lb) 3/	13,174.1	10,628.1	6,706.0	646.5	660.4	429.3	746.4	1,628.4	1,486.5	1,091.9
Butter (mil lb)	334.2	287.6	187.3	16.9	22.2	10.9	18.7	56.4	59.7	36.1
Am cheese (mil lb)	629.0	468.4	282.0	29.9	19.8	20.4	36.1	46.6	25.4	34.7
Nonfat dry milk (mil lb)	940.6	827.3	559.4	57.7	30.4	24.2	42.4	48.1	39.6	49.8
Milk										
Milk prod. 21 States (mil lb)	121,043	121,433	121,094	10,384	9,931	9,572	10,038	10,205	9,740	10,647
Milk per cow (lb)	13,160	13,399	13,932	1,190	1,148	1,107	1,158	1,177	1,126	1,234
Number of milk cows (thou)	9,198	9,063	8,692	8,727	8,653	8,647	8,667	8,667	8,649	8,630
U.S. milk production (mil lb)	143,147	143,381	142,462	6/12,250	6/11,665	6/11,264	6/11,808	6/12,042	6/11,493	6/12,563
Stock, beginning										
Total (mil lb)	16,704	13,685	12,867	13,066	9,984	8,804	8,147	7,371	7,628	8,462
Commercial (mil lb)	4,937	4,590	4,165	4,316	5,386	5,026	4,696	4,577	4,777	4,910
Government (mil lb)	11,767	9,105	8,702	8,751	4,598	3,779	3,451	2,794	2,852	3,552
Imports, total (mil lb) 3/	2,777	2,733	2,490	195	261	279	249	233	196	NA
Commercial disappearance milk equiv. (mil lb)	130,640	133,350	135,274	11,445	11,409	11,233	11,213	10,230	9,866	NA
Butter										
Production (mil lb)	1,247.8	1,202.4	1,104.1	105.4	91.2	87.9	108.5	124.7	117.1	116.3
Stocks, beginning (mil lb)	296.5	205.5	193.0	231.6	176.2	165.6	158.5	143.2	157.3	198.3
Commercial disappearance (mil lb)	918.2	922.9	902.5	87.3	73.0	85.0	81.3	65.6	52.0	NA
American cheese										
Production (mil lb)	2,855.2	2,798.2	2,716.6	237.1	214.1	207.4	232.6	225.8	221.0	244.6
Stocks, beginning (mil lb)	960.5	850.2	697.1	635.3	505.0	446.5	401.8	364.1	365.7	362.0
Commercial disappearance (mil lb)	2,279.1	2,382.8	2,444.1	197.7	222.1	196.5	227.4	173.5	196.7	NA
Other cheese										
Production (mil lb)	2,225.7	2,411.1	2,627.6	220.4	234.5	224.4	237.2	207.0	207.8	239.3
Stocks, beginning (mil lb)	101.4	94.1	92.0	88.1	95.5	96.8	92.6	89.7	90.0	88.4
Commercial disappearance (mil lb)	2,515.7	2,684.9	2,880.1	240.3	260.3	260.3	262.5	224.3	224.8	NA
Nonfat dry milk										
Production (mil lb)	1,390.0	1,284.1	1,059.0	92.6	64.7	65.5	90.0	83.8	85.8	95.8
Stocks, beginning (mil lb)	1,247.6	1,011.1	686.8	559.7	245.9	200.4	188.0	177.2	130.7	152.2
Commercial disappearance (mil lb)	435.0	479.1	495.1	41.0	44.4	41.3	28.1	44.0	39.7	NA
Frozen dessert										
Production (mil gal) 4/	1,251.0	1,248.6	1,263.4	108.7	91.4	80.3	82.4	76.0	87.6	110.4

1/ Manufacturing grade milk. 2/ Prices paid f.o.b. Central States Production area, high heat spray process.  
3/ Milk-equivalent, fat-basis. 4/ Ice cream, ice milk, and hard sherbet. 5/ Based on average milk price after adjustment for price-support deductions. 6/ Estimated. NA = not available. P = preliminary.

Information contact: Jim Miller (202) 786-1770.

Table 15.—Wool

	Annual			1987				1988		
	1985	1986	1987	Mar	Oct	Nov	Dec	Jan	Feb	Mar
U.S. wool price, Boston 1/ (cts/lb)	192	191	265	216	300	300	300	315	397	435
Imported wool price, Boston 2/ (cts/lb)	197	201	247	234	259	274	278	295	330	370
U.S. mill consumption, scoured										
Apparel wool (thou lb)	106,051	126,768	129,677	12,857	10,931	9,556	11,173	10,106	10,103	13,176
Carpet wool (thou lb)	10,562	9,960	13,092	1,308	1,412	1,063	708	1,323	1,418	1,786

1/ Wool price delivered at U.S. mills, clean basis. Graded Territory 64's (20.60-22.04 microns) staple 2-3/4" and up. 2/ Wool price delivered at U.S. mills, clean basis, Australian 60/62's, type 64A (24 micron). Duty since 1982 has been 10.0 cents.

Information contact: John Lawler (202) 786-1840.



Table 16.—Meat Animals

	Annual			1987				1988		
	1985	1986	1987	Mar	Oct	Nov	Dec	Jan	Feb	Mar
Cattle on feed (7 States)										
Number on feed (thou head) 1/	8,635	7,920	7,643	7,163	7,535	8,364	8,412	8,066	7,856	7,572
Placed on feed (thou head)	19,346	20,035	21,020	1,719	2,604	1,609	1,350	1,660	1,369	1,833
Marketings (thou head)	18,989	19,263	19,390	1,561	1,690	1,458	1,577	1,759	1,527	1,573
Other disappearance (thou head)	1,132	1,049	1,207	89	85	103	119	111	126	106
Beef steer-corn price ratio,										
Omaha 2/	23.3	31.0	41.0	41.6	41.2	38.4	36.7	36.4	37.4	38.4
Hog-corn price ratio, Omaha 2/	17.8	27.8	33.7	32.6	31.0	24.3	23.8	25.0	25.7	23.0
Market prices (\$/cwt)										
Slaughter cattle										
Choice steers, Omaha	58.37	57.75	64.60	61.59	64.81	64.20	63.93	65.00	68.31	71.53
Utility cows, Omaha	38.32	37.19	44.83	45.01	46.41	44.46	46.69	47.83	49.55	49.83
Choice vealers, S. St. Paul	58.28	59.92	78.74	70.00	82.50	82.50	83.00	86.88	87.50	87.50
Feeder cattle										
Choice, Kansas City, 600-700 lb.	64.56	62.79	75.36	71.13	77.00	79.50	78.90	85.00	83.53	85.20
Slaughter hogs										
Barrows & gilts, 7-markets	44.77	51.19	51.69	48.22	48.75	40.65	41.14	44.43	47.01	42.79
Feeder pigs										
S. Mo. 40-50 lb. (per head)	37.20	45.62	46.69	54.98	41.53	36.56	31.74	37.47	44.80	48.65
Slaughter sheep & lambs										
Lambs, Choice, San Angelo	68.61	69.46	78.09	86.50	66.25	65.00	73.83	83.53	77.25	83.75
Ewes, Good, San Angelo	34.02	34.78	38.62	42.50	37.12	37.83	39.88	43.19	38.25	41.17
Feeder lambs										
Choice, San Angelo	85.91	73.14	102.26	108.50	102.00	99.50	105.83	113.63	112.63	111.30
Wholesale meat prices, Midwest										
Choice steer beef, 600-700 lb.	90.76	88.98	97.21	92.86	96.77	95.34	94.50	97.15	99.50	103.47
Canner & cutter cow beef	74.13	71.31	83.70	84.58	83.80	83.41	88.45	88.98	92.18	90.33
Pork loins, 8-14 lb. 3/	91.51	104.78	106.23	93.25	103.49	80.35	84.70	102.43	94.93	87.82
Pork bellies, 12-14 lb.	59.50	65.82	63.11	60.02	49.39	45.86	42.60	51.82	48.40	45.32
Hams, skinned, 14-17 lb.	67.50	80.01	80.96	71.97	97.81	96.36	91.98	66.70	76.67	78.35
All fresh beef retail Price 4/	NA	NA	212.64	206.11	217.69	218.57	218.53	213.95	217.58	219.97
Commercial slaughter (thou head)-										
Cattle	36,293	37,288	35,647	2,904	3,131	2,752	2,900	2,921	2,758	2,896
Steers	16,912	17,516	17,443	1,413	1,512	1,314	1,425	1,464	1,400	1,436
Heifers	11,237	11,097	10,906	892	962	817	868	891	815	894
Cows	7,391	7,960	6,608	542	593	570	555	519	495	512
Bulls & stags	758	715	690	57	64	51	51	47	48	54
Calves	3,385	3,408	2,836	263	249	223	253	214	210	223
Sheep & lambs	6,165	5,635	5,198	443	460	411	451	390	416	548
Hogs	84,492	79,598	81,090	6,967	7,723	7,321	7,815	6,977	6,682	7,680
Commercial production (mil lb)										
Beef	23,557	24,213	23,406	1,907	2,098	1,829	1,925	1,943	1,828	1,925
veal	499	509	422	38	37	32	36	32	32	33
Lamb & mutton	352	331	309	27	28	25	27	24	26	35
Pork	14,728	13,988	14,314	1,226	1,363	1,312	1,390	1,244	1,183	1,360
	Annual			1986				1987		
	1985	1986	1987	IV	I	II	III	IV	I	II
Cattle on feed (13 States)										
Number on feed (thou head) 1/	10,653	9,754	9,245	8,197	9,245	8,807	8,666	8,992	9,769	9,365
Placed on feed (thou head)	23,366	23,583	24,874	6,756	5,680	5,906	6,590	6,698	5,796	NA
Marketings (thou head)	22,887	22,856	22,971	5,396	5,747	5,619	6,022	5,583	5,810	6/5,931
Other disappearance (thou head)	1,378	1,236	1,379	312	371	428	242	338	390	NA
Hogs & pigs (10 States) 5/										
Inventory (thou head) 1/	42,420	41,100	39,690	39,585	39,690	38,370	40,880	43,075	42,275	40,485
Breeding (thou head) 1/	5,348	5,258	5,110	4,895	5,110	5,215	5,325	5,300	5,400	5,420
Market (thou head) 1/	37,072	35,842	34,580	34,690	34,580	33,155	35,555	37,775	36,875	35,075
Farrowings (thou head)	8,831	8,223	8,783	2,115	1,967	2,352	2,257	2,258	2,030	6/2,399
Pig Crop (thou head)	67,648	63,835	68,417	16,460	14,840	18,601	17,481	17,495	15,765	NA

1/ Beginning of period. 2/ Bushels of corn equal in value to 100 pounds live weight. 3/ Beginning January 1984 prices are for 14-17 lb.; January 1986 prices are for 14-18 lb. 4/ New series estimating the composite price of all beef grades and ground beef sold by retail stores. This new series in addition to but does not replace the series for the retail price of choice beef that appears in table B. 5/ Quarters are Dec. of preceding year-Feb. (I), Mar.-May (II), June-Aug. (III), and Sept.-Nov. (IV). 6/ Intentions. \*Classes estimated. NA = not available.

Information contacts: Ron Gustafson or Leland Southard (202) 786-1285.

# Crops and Products

Table 17.—Supply & Utilization<sup>1,2</sup>

	Area			Yield	Production	Total supply	Feed and residual	Other domestic use	Exports	Total use	Ending stocks	Farm price
	Set aside 3/	Planted	Harvested									
	Mill. acres		Bu./acre				Mill. bu					
Wheat												
1982/83	30.6	76.4	61.4	39.4	2,420	3,939	369	742	1,429	2,540	1,399	3.51
1983/84	18.3	79.2	66.9	38.8	2,595	4,003	405	749	1,424	2,578	1,425	3.39
1984/85	18.8	75.6	64.7	37.5	2,425	3,866	270	776	915	1,961	1,805	3.08
1985/86*	20.4	72.1	60.7	34.4	2,092	4,018	385	808	1,004	2,197	1,621	2.42
1986/87*	20.2	65.8	55.9	37.6	2,105	3,941	275	835	1,600	2,710	1,231	2.55
1987/88*	--	--	--	--	2,170	3,416	250	870	1,500	2,620	796	2.80-3.20
Rice	Mill. acres		Lb./acre				Mill. cwt (rough equiv.)					
1982/83	1.74	2.19	2.17	4,598	99.7	172.1	--	6/54.9	70.3	125.0	46.9	8.57
1983/84	.79	2.83	2.80	4,954	138.6	187.3	--	6/60.5	62.1	122.6	64.7	8.04
1984/85	1.24	2.51	2.49	5,414	134.9	201.8	--	6/65.8	58.7	124.5	77.3	6.53
1985/86*	1.27	2.38	2.36	5,551	133.4	213.3	--	6/76.3	85.4	161.7	51.6	3.75
1986/87*	1.26	2.35	2.33	5,482	127.7	182.3	--	6/80.8	73.0	153.8	28.5	7.00-7.50
1987/88*	--	--	--	--	157.0	188.7	--	6/83.5	77.0	160.5	28.2	5.00-7.00
Corn	Mill. acres		Bu./acre				Mill. bu					
1982/83	32.2	60.2	51.5	81.1	4,175	7,700	3,818	975	1,901	6,694	1,006	3.21
1983/84	3.9	80.5	71.9	106.7	7,674	8,684	4,079	1,091	1,865	7,036	1,648	2.63
1984/85	5.4	83.4	75.2	118.0	8,877	10,536	4,095	1,160	1,241	6,496	4,040	2.23
1985/86*	13.6	76.7	69.2	119.3	8,250	12,291	4,714	1,192	1,504	7,410	4,882	1.50
1986/87*	21.6	65.7	59.2	118.4	7,064	11,948	4,900	1,236	1,700	7,836	4,112	1.65-1.85
1987/88*	--	--	--	--	7,300	11,414	5,000	1,275	1,756	8,025	3,389	1.65-2.00
Sorghum	Mill. acres		Bu./acre				Mill. bu					
1982/83	8.7	11.9	10.0	48.7	488	927	385	10	245	640	287	2.74
1983/84	.6	17.3	15.4	56.4	866	1,154	539	18	297	854	300	2.32
1984/85	.9	18.3	16.8	66.8	1,120	1,420	664	28	178	869	551	1.93
1985/86*	2.3	15.3	13.9	67.7	938	1,488	545	15	198	758	732	1.37
1986/87*	3.8	11.8	10.6	69.9	741	1,472	550	15	225	790	682	1.50-1.70
1987/88*	--	--	--	--	650	1,332	500	15	210	725	607	1.55-1.85
Barley	Mill. acres		Bu./acre				Mill. bu					
1982/83	1.1	10.4	9.7	52.3	509	733	282	170	92	544	189	2.47
1983/84	.5	12.0	11.2	53.4	599	799	304	170	77	551	247	2.29
1984/85	.7	13.2	11.6	51.0	591	848	333	169	22	523	325	1.98
1985/86*	1.8	13.1	12.0	50.8	611	942	286	174	137	606	336	1.61
1986/87*	2.9	11.0	10.0	52.6	527	878	275	175	130	580	298	1.80-1.85
1987/88*	--	--	--	--	500	813	265	175	100	540	273	1.70-2.00
Oats	Mill. acres		Bu./acre				Mill. bu					
1982/84	.3	20.3	9.1	52.6	477	727	466	78	2	546	181	1.62
1984/85	.1	12.4	8.2	58.0	474	689	433	74	1	509	180	1.67
1985/86	.1	13.3	8.2	63.7	521	728	460	82	2	544	184	1.23
1986/87*	.4	14.7	6.9	56.3	386	603	395	73	3	471	133	1.21
1987/88*	1.0	18.0	6.9	54.0	374	542	350	75	1	426	116	1.55-1.60
1988/89*	--	--	--	--	450	596	380	80	1	461	125	1.25-1.45
Soybeans	Mill. acres		Bu./acre				Mill. bu					
1983/84	0	63.8	62.5	26.2	1,636	1,981	7/79	983	743	1,805	176	7.83
1984/85	0	67.8	66.1	28.1	1,861	2,037	7/93	1,030	598	1,721	316	5.84
1985/86	0	63.1	61.6	34.1	2,099	2,415	7/86	1,053	740	1,879	536	5.05
1986/87*	0	60.4	58.3	33.3	1,940	2,476	7/104	1,179	757	2,040	436	4.78
1987/88*	0	57.4	56.4	33.7	1,905	2,341	7/96	1,170	800	2,066	275	5.75
1988/89*	0	--	--	--	1,880	2,155	--	1,155	760	2,010	145	5.75-7.75
Soybean oil	Mill. lbs		8/ Cts/lb									
1983/84	--	--	--	--	10,872	12,133	--	9,588	1,824	11,412	721	30.60
1984/85	--	--	--	--	11,468	12,209	--	9,917	1,660	11,577	632	29.50
1985/86	--	--	--	--	11,617	12,257	--	10,052	1,257	11,310	947	18.00
1986/87*	--	--	--	--	12,783	13,745	--	10,833	1,187	12,020	1,725	15.40
1987/88*	--	--	--	--	12,878	14,605	--	11,000	2,205	13,205	1,400	20.00
1988/89*	--	--	--	--	12,720	14,120	--	11,200	1,700	12,900	1,220	20.00-25.00
Soybean meal	Thou. tons		9/ \$/ton									
1983/84	--	--	--	--	22,756	23,230	--	17,615	5,360	22,975	255	188
1984/85	--	--	--	--	24,529	24,784	--	19,480	4,917	24,397	387	125
1985/86	--	--	--	--	24,951	25,328	--	19,090	6,036	25,126	212	155
1986/87*	--	--	--	--	27,758	27,970	--	20,387	7,343	27,730	240	163
1987/88*	--	--	--	--	28,010	28,050	--	21,050	6,700	27,750	300	185
1988/89*	--	--	--	--	27,500	27,800	--	21,000	6,500	27,500	300	180-230

See footnotes at end of table.

Table 17.—Supply &amp; Utilization, continued

	Area				Production	Total supply 4/	Feed and residual	Other domestic use	Exports	Total use	Ending stocks	Farm price 5/
	Set aside 3/	Planted	Harvested	yield								
	Mil. acres		Lb./acre				Mil. bales		Cts/lb			
Cotton 10/												
1983/84	6.8	7.9	7.3	508	7.8	15.7	---	5.9	6.8	12.7	2.8	65.30
1984/85	2.5	11.1	10.4	600	13.0	15.8	--	5.5	6.2	11.8	4.1	58.70
1985/86	3.6	10.7	10.2	630	13.4	17.6	--	6.4	2.0	8.4	9.4	58.50
1986/87*	3.4	10.0	8.5	552	9.7	19.1	---	7.4	6.7	14.1	5.0	52.40
1987/88*	3.3	10.4	10.0	706	14.8	19.8	--	7.8	6.6	14.4	5.5	64.20
1988/89*	--	--	--	--	14.0	19.5	--	7.4	6.0	13.4	6.2	--

\*May 10, 1988 Supply and Demand Estimates. 1/ Marketing year beginning June 1 for wheat, barley, and oats, August 1 for cotton and rice, September 1 for soybeans, corn, and sorghum, October 1 for soybean oil, and soybean meal. 2/ Conversion factors: Hectare (ha) = 2.471 acres, 1 metric ton = 2204.622 pounds, 36 7437 bushels of wheat or soybeans, 39 3679 bushels of corn or sorghum, 45 9296 bushels of barley, 58 8944 bushels of oats, 22 046 cwt. of rice, and 4 59 480-pound bales of cotton. 3/ Includes diversion, PIK, and acreage reduction programs. 4/ Includes imports. 5/ Market average prices do not include an allowance for loans outstanding and Government purchases. 6/ Residual included in domestic use. 7/ Includes seed. 8/ Average of crude soybean oil, Decatur. 9/ Average of 44 percent, Decatur. 10/ Upland and extra long staple. Stock estimates based on Census Bureau data which results in an unaccounted difference between supply and use estimates and changes in ending stocks.

Information contact: Commodity Economics Division, Crops Branch (202) 786-1840.

Table 18.—Food Grains

	Marketing year 1/				1987			1988		
	1983/84	1984/85	1985/86	1986/87	Mar	Nov	Dec	Jan	Feb	Mar
<b>Wholesale prices</b>										
Wheat, No. 1 HRW,										
Kansas City (\$/bu) 2/	3.84	3.74	3.28	2.72	2.90	2.90	3.70	3.20	3.28	3.10
Wheat, DNS,										
Minneapolis (\$/bu) 2/	4.21	3.70	3.25	2.62	2.61	2.81	2.96	3.12	3.26	3.05
Rice, S.W. La. (\$/cwt) 3/	19.38	17.98	16.11	10.25	9.90	19.75	19.70	20.60	24.45	24.50
<b>Wheat</b>										
Exports (mil bu)	1,429	1,424	915	1,004	72	79	118	148	147	NA
Mill grind (mil bu)	694	676	711	779	64	68	64	58	59	NA
Wheat flour production (mil cwt)	308	301	320	351	29	30	28	26	26	NA
<b>Rice</b>										
Exports (mil cwt, rough equiv)	70.3	62.1	58.7	85.4	5.4	8.0	4.5	5.8	6.7	NA
	Marketing year 1/				1986		1987		1988	
	1984/85	1985/86	1986/87		Jun-Aug	Sept-Nov	Dec-Feb	Mar-May	Jun-Aug	Sept-Nov
<b>wheat</b>										
Stocks, beginning (mil bu)	1,399	1,425	1,905	1,905.0	3,154.6	2,671.5	2,249.8	1,820.9	2,988.5	2,505.9
<b>Domestic use:</b>										
Food (mil bu)	651	683	714	174.1	192.2	177.2	180.3	184.9	196.1	175
Feed & seed (mil bu) 4/	502	363	548	346.8	31.1	47.6	38.7	345.5	-17.7	13
Exports (mil bu)	1,424	915	1,004	320.6	263.4	202.7	216.8	409.9	309.5	412

1/ Beginning June 1 for wheat and August 1 for rice. 2/ Ordinary protein. 3/ Long-grain, milled basis. 4/ Feed use approximated by residual. NA = not available.

Information contacts: Ed Allen and Janet Livezey (202) 786-1840.

Table 19.—Cotton

	Marketing year 1/				1987			1988		
	1983/84	1984/85	1985/86	1986/87	Mar	Nov	Dec	Jan	Feb	Mar
<b>U.S. price, SLM,</b>										
1-1/16 in. (cts/lb) 2/	73.1	60.5	60.0	53.2	54.6	64.7	62.3	59.7	57.8	59.6
<b>Northern Europe prices:</b>										
Index (cts/lb) 3/	87.6	69.2	48.9	62.0	63.0	75.8	75.3	72.2	67.5	66.3
U.S. M 1-3/32 in. (cts/lb) 4/	87.1	73.9	64.8	61.8	62.6	76.4	75.0	72.8	69.8	70.8
U.S. mill consumption (thou bales)	5,927	5,545	6,399	7,452	676	666	645	721	663	702
Exports (thou bales)	6,786	6,201	1,969	6,684	653	615	721	663	740	908
Stocks, beginning (thou bales)	7,937	2,775	4,102	9,348	11,078	9,585	11,977	12,867	12,507	11,303

1/ Beginning August 1. 2/ Average spot market. 3/ Liverpool Outlook (A) index; average of 5 lowest priced of 11 selected growths. 4/ Memphis territory growths.

Information contact: Bob Skinner (202) 786-1840.



Table 20.—Feed Grains

	Marketing year 1/				1987			1988		
	1983/84	1984/85	1985/86	1986/87	Mar	Nov	Dec	Jan	Feb	Mar
Wholesale prices										
Corn, No. 2 yellow, Chicago (\$/bu)	3.46	2.79	2.35	1.64	1.60	1.86	1.89	1.95	2.01	2.03
Sorghum, No. 2 yellow, Kansas City (\$/cwt)	5.22	4.46	3.72	2.73	2.80	2.90	2.95	3.05	3.24	3.27
Barley, feed, Duluth (\$/bu) 2/	2.48	2.09	1.53	1.44	1.64	1.82	1.74	1.72	1.77	1.88
Barley, malting, Minneapolis (\$/bu)	2.84	2.55	2.24	1.89	2.01	2.05	2.01	2.02	2.15	2.08
Exports										
Corn (mil bu)	1,902	1,865	1,241	1,504	145	123	149	134	125	NA
Feed grains (mil metric tons) 3/	56.5	56.6	36.6	46.3	4.7	3.8	4.2	4.1	4.0	NA
	Marketing year 1/				1986		1987			1988
	1983/84	1984/85	1985/86	1986/87	Sept-Nov	Dec-Feb	Mar-May	Jun-Aug	Sept-Nov	Dec-Feb
Corn										
Stocks, beginning (mil bu)	3,523	1,006	1,648	4,040	4,040	10,306	8,248	6,332	4,882	9,769
Domestic use:										
Feed (mil bu)	3,818	4,079	4,095	4,717	1,384	1,472	1,091	768	1,488	1,451
Food, seed, ind. (mil bu)	975	1,091	1,160	1,191	280	270	325	315	292	277
Exports (mil bu)	1,902	1,865	1,241	1,504	321	315	500	368	398	410
Total use (mil bu)	6,694	7,036	6,496	7,410	1,985	2,058	1,917	1,451	2,178	2,138

1/ September 1 for corn and sorghum; June 1 for oats and barley. 2/ Beginning March 1987 reporting point changed from Minneapolis to Duluth. 3/ Aggregated data for corn, sorghum, oats, and barley. NA = not available

Information contact: James Cole (202) 786-1840.

Table 21.—Fats &amp; Oils

	Marketing year 1/				1987				1988	
	1983/84	1984/85	1985/86	1986/87	Feb	Oct	Nov	Dec	Jan	Feb
Soybeans										
Wholesale price, No. 1 yellow, Chicago (\$/bu) 2/	7.78	5.88	5.20	5.03	4.84	5.18	5.53	5.85	6.13	6.14
Crushings (mil bu)	982.7	1,030.5	1,052.8	1,178.8	102.3	102.5	111.2	110.8	106.7	99.8
Exports (mil bu)	742.8	600.7	740.7	756.9	73.8	97.9	98.1	76.7	77.0	97.0
Stocks, beginning (mil bu)	344.6	175.7	316.0	536.0	113.1	65.7	158.5	155.5	145.0	141.8
Soybean oil										
Wholesale price, crude, Decatur (cts/lb)	30.55	29.52	18.02	15.36	15.40	17.03	17.55	19.00	21.98	20.94
Production (mil lb)	10,862.8	11,467.9	11,617.3	12,783.1	1,109.6	1,119.7	1,207.1	1,208.1	1,170.2	1,091.5
Domestic disp. (mil lb)	9,589.6	9,888.5	10,045.9	10,820.1	856.0	1,083.9	895.1	857.3	804.0	957.5
Exports (mil lb)	1,813.7	1,659.9	1,257.3	1,184.5	74.0	100.1	139.0	134.0	25.7	281.0
Stocks, beginning (mil lb)	1,260.9	720.5	632.5	946.6	1,837.3	1,725.0	1,660.6	1,833.7	2,050.5	2,390.9
Soybean meal										
Wholesale price, 44% protein, Decatur (\$/ton)	188.21	125.46	154.88	162.61	151.40	185.50	206.60	214.80	193.75	183.00
Production (thou ton)	22,756.2	24,529.9	24,951.3	27,758.8	2,409.9	2,439.4	2,667.8	2,649.3	2,554.4	2,376.3
Domestic disp. (thou ton)	17,538.8	19,481.3	19,117.2	20,387.4	1,513.5	2,151.6	2,113.9	2,012.6	1,825.2	1,475.0
Exports (thou ton)	5,436.1	4,916.5	6,009.3	7,343.0	930.1	260.4	509.7	652.3	635.0	986.9
Stocks, beginning (thou ton)	474.1	255.4	386.9	211.7	311.2	240.2	267.6	311.8	296.2	390.4
Margarine, wholesale price, Chicago, white (cts/lb)	46.3	55.5	51.2	40.3	39.75	41.69	42.65	44.20	46.75	46.00

1/ Beginning September 1 for soybeans; October 1 for soybean oil and meal; calendar year for margarine. 2/ Beginning April 1, 1982. Prices based on 30-day delivery, using upper end of the range.

Information contacts: Roger Hoskin (202) 786-1840; Tom Bickerton (202) 786-1824.



Table 23.—Fruit

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987 P
Citrus 1/												
Production (thou ton)	15,242	14,255	13,329	16,484	15,105	12,057	13,608	10,792	10,488	11,074	11,952	12,673
Per capita consumption (lbs) 2/	117.2	124.5	107.4	108.5	112.7	104.7	109.6	120.2	102.8	115.7	109.8	NA
Non citrus 3/												
Production (thou tons)	11,846	12,274	12,460	13,689	15,152	12,961	14,217	14,154	14,292	14,188	13,916	15,333
Per capita consumption (lbs) 2/	84.2	84.3	82.5	85.8	87.3	88.1	89.0	89.0	93.7	92.6	95.3	NA
	1987						1988					
F.O.B. shipping point prices	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar
Apples (\$/carton) 4/	15.35	16.63	17.60	14.34	11.60	NA	7.93	7.83	8.98	7.75	11.50	11.08
Pears (\$/box) 5/	14.10	15.28	21.00	NA	NA	NA	12.00	10.82	9.70	8.26	11.18	8.94
Oranges (\$/box) 6/	5.15	5.62	6.47	6.29	6.18	6.01	7.36	10.23	5.45	6.19	6.24	5.99
Grapefruit (\$/box) 6/	1.85	2.27	4.34	5.58	5.95	5.07	5.07	6.81	5.84	5.34	5.25	4.86
Stocks, ending												
Fresh apples (mil lbs)	751.9	386.3	203.8	74.9	4.2	2,687.1	5,380.2	4,697.2	3,311.6	3,158.9	2,417.4	1,581.1
Fresh pears (mil lbs)	53.7	21.1	1.7	11.8	195.2	507.1	425.8	338.8	278.4	198.4	148.4	99.7
Frozen fruits (mil lbs)	495.6	510.6	625.9	865.7	908.3	908.7	957.9	943.1	858.2	790.4	720.1	631.4
Frozen orange juice (mil lbs)	989.0	1,109.1	1,105.1	942.1	792.6	840.0	652.8	569.0	662.4	980.4	1,073.1	969.4

1/ Crop year beginning with year indicated. 2/ Per capita consumption for total U.S. population, including military consumption of both fresh and processed fruit in fresh weight equivalent. 3/ Calendar year. 4/ Red Delicious, Washington, extra fancy, carton tray pack, 80-113's. 5/ D'Anjou, Washington, standard box wrapped, U.S. No. 1, 90-135's. 6/ U.S. equivalent on-tree returns. P = Preliminary. NA = not available.

Information contact: Ben Huang (202) 786-1885.

Table 24.—Vegetables

	Calendar years												
	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987			
Production													
Total vegetables (1,000 cwt) 1/	382,165	413,925	381,370	379,123	431,515	403,320	457,392	453,769	445,436	462,402			
Fresh (1,000 cwt) 1/ 2/	182,563	190,859	190,228	194,694	207,924	197,919	217,132	217,932	216,267	218,190			
Processed (tons) 3/	9,980,100	11,153,300	9,557,100	9,221,460	11,179,590	10,270,050	12,013,020	11,791,860	11,616,560	12,210,580			
Mushrooms (1,000 lbs)	454,007	470,069	469,576	517,146	490,826	561,531	595,681	587,856	NA	NA			
Potatoes (1,000 cwt)	366,314	342,447	302,857	338,591	355,131	333,911	362,612	407,109	361,511	385,774			
Sweet potatoes (1,000 cwt)	13,115	13,370	10,953	12,799	14,833	12,083	12,986	14,853	12,674	12,103			
Dry edible beans (1,000 cwt)	18,935	20,552	26,729	32,751	25,563	15,520	21,070	22,175	22,886	26,309			
	1987						1988						
Shipments	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar
Fresh (1,000 cwt) 4	22,286	20,011	23,887	35,745	23,791	17,075	20,213	16,104	15,445	18,964	17,690	18,523	18,500
Potatoes (1,000 cwt)	15,668	13,560	12,165	12,622	7,631	8,514	11,384	9,718	11,021	10,685	11,759	10,485	10,205
Sweet potatoes (1,000 cwt)	293	299	177	98	34	136	322	359	795	518	281	274	270

1/ 1983 data are not comparable with 1984 and 1985. 2/ Estimate reinstated for asparagus with the 1984 crop. All other years also include broccoli, shiitake, cauliflower, celery, sweet corn, lettuce, honeydews, onions, and tomatoes. 3/ Estimates reinstated for cucumbers with the 1984 crop; all other years also include snap beans, sweet corn, green peas, and tomatoes. 4/ Includes snap beans, broccoli, cabbage, carrots, cauliflower, celery, sweet corn, cucumbers, eggplant, lettuce, onions, bell peppers, squash, tomatoes, cantaloupes, honeydews, and watermelons. NA = not available.

Information contacts: Shannon Hall or Cathy Greene (202) 786-1884.

Table 25.—Other Commodities

	Annual					1987					1988	
	1983	1984	1985	1986	1987	Jan-Mar	Apr-June	July-Sept	Oct-Dec		Jan-Mar	
Sugar												
Production 1/	5,682	5,890	5,969	6,257	7,278	2,024	766	866	3,622		NA	
Deliveries 1/	8,812	8,454	8,035	7,786	8,172	1,908	2,002	2,146	2,116		NA	
Stocks, ending 1/	2,570	3,005	3,126	3,227	965	3,497	2,476	1,497	965		NA	
Coffee												
Composite green price	131.51	142.95	137.46	185.18	109.14	115.38	105.81	99.16	116.12		121.98 P	
N.Y. 1c/5lb												
Imports, green bean equiv. (mil lbs) 2/	2,259	2,411	2,550	2,596	2,638	563	790	645	640		585 P	
	Annual					1987					1988	
	1985	1986	1987 P	Jan	Aug	Sept	Oct	Nov	Dec		Jan	
Tobacco												
Prices at auctions 3/												
Flue-cured (\$/lb)	1.72	1.52	NA	NQ	1.47	1.65	1.66	1.42	NQ		NQ	
Burley (\$/lb)	1.59	1.57	NA	1.52	NQ	NQ	NQ	1.58	1.58		1.51	
Domestic consumption 4/												
Cigarettes (bil)	594.0	584.0	577.0	38.1	49.8	51.0	48.6	52.6	48.5		32.4	
Large cigars (mil)	3,226	3,090	2,757	223.4	220.2	253.7	250.7	213.6	220.2		151.4	

1/ 1,000 short tons, raw value. Quarterly data shown at end of each quarter. 2/ Net imports of green and processed coffee. 3/ Crop year July-June for flue-cured, October-September for burley. 4/ Taxable removals. P = Preliminary. NA = not available. NQ = no quote.

Information contacts: (sugar) Peter Buzzanell (202) 786-1888; (coffee) Fred Gray (202) 786-1888; (tobacco) Verner Grise (202) 786-1890.



Table 26.—World Supply & Utilization of Major Crops, Livestock, & Products

	1982/83	1983/84	1984/85	1985/86	1986/87	1987/88 P	1988/89 F
Million units							
<b>Wheat</b>							
Area (hectare)	237.7	229.1	231.4	229.3	228.0	220.0	
Production (metric ton)	477.3	489.4	511.8	499.8	529.7	504.9	520.7
Exports (metric ton) 1/	98.7	102.0	107.0	85.0	90.7	104.7	100.1
Consumption (metric ton) 2/	460.1	474.2	492.8	495.7	521.7	533.9	536.4
Ending stocks (metric ton) 3/	130.0	145.2	164.2	168.2	176.1	147.2	131.5
<b>Coarse grains</b>							
Area (hectare)	339.7	335.3	335.5	340.5	336.6	322.8	
Production (metric ton)	784.0	687.2	814.1	841.8	833.8	784.9	804.4
Exports (metric ton) 1/	90.0	93.3	100.4	83.2	83.4	83.9	86.4
Consumption (metric ton) 2/	753.4	758.3	781.4	778.4	809.1	812.8	823.7
Ending stocks (metric ton) 3/	181.4	110.4	143.1	206.4	231.0	203.1	183.7
<b>Rice, milled</b>							
Area (hectare)	141.1	144.3	144.4	144.9	145.1	142.0	
Production (metric ton)	286.5	308.6	319.0	319.1	317.9	304.2	325.0
Exports (metric ton) 4/	11.9	12.6	11.5	12.8	12.7	10.4	
Consumption (metric ton) 2/	286.5	305.1	311.0	320.2	322.2	313.7	325.7
Ending stocks (metric ton) 3/	43.3	46.7	54.8	53.8	49.5	40.0	39.3
<b>Total grains</b>							
Area (hectare)	718.5	708.7	711.3	714.7	709.7	684.8	
Production (metric ton)	1,547.8	1,485.2	1,644.9	1,660.7	1,681.4	1,594.0	1,650.1
Exports (metric ton) 1/	200.6	207.9	218.9	181.0	186.8	199.0	
Consumption (metric ton) 2/	1,500.0	1,537.6	1,585.2	1,594.3	1,653.0	1,660.4	1,685.8
Ending stocks (metric ton) 3/	354.7	302.3	362.1	428.4	456.6	390.3	354.5
<b>Oilseeds</b>							
Crush (metric ton)	143.5	135.8	150.6	154.5	160.4	166.2	
Production (metric ton)	178.2	165.0	191.1	196.0	194.0	203.7	
Exports (metric ton)	35.2	33.0	33.1	34.4	37.6	39.1	
Ending stocks (metric ton)	20.5	15.7	21.1	26.6	23.2	20.2	
<b>Meals</b>							
Production (metric ton)	98.1	92.5	101.8	104.6	109.4	113.4	
Exports (metric ton)	31.6	29.7	32.3	34.4	36.3	36.0	
<b>Oils</b>							
Production (metric ton)	43.4	42.1	46.1	49.3	50.1	51.9	
Exports (metric ton)	14.0	13.7	15.5	16.3	16.6	17.4	
<b>Cotton</b>							
Area (hectare)	31.4	31.0	33.9	31.9	30.2	32.5	
Production (bale)	68.1	67.7	88.1	79.6	70.5	79.5	83.5
Exports (bale)	19.4	19.2	20.5	20.5	26.1	23.9	23.0
Consumption (bale)	68.3	68.7	70.4	75.6	82.3	81.9	82.0
Ending stocks (bale)	25.1	25.1	41.5	47.0	34.4	32.0	33.2
	1982	1983	1984	1985	1986	1987 P	1988 F
<b>Red meat</b>							
Production (mil metric tons)	94.8	97.5	99.3	103.3	105.6	105.4	107.1
Consumption (mil metric tons)	93.3	95.8	97.4	101.2	104.7	103.8	105.9
Exports (mil metric tons) 1/	5.8	5.9	5.9	6.2	6.6	6.5	6.7
<b>Poultry</b>							
Production (mil metric tons)	23.7	24.4	25.2	26.2	27.3	29.0	30.2
Consumption (mil metric tons)	23.3	24.3	24.8	25.9	26.9	28.5	29.8
Exports (mil metric tons) 1/	1.4	1.3	1.3	1.2	1.3	1.4	1.4
<b>Dairy</b>							
Milk production (mil metric tons)	396.9	413.0	413.4	417.8	423.9	419.0	421.9

1/ Excludes intra-EC trade. 2/ Where stocks data not available (excluding USSR), consumption includes stock changes. 3/ Stocks data are based on differing marketing years and do not represent levels at a given date. Data not available for all countries; includes estimated change in USSR grain stocks but not absolute level. 4/ Calendar year data. 1983 data correspond with 1982/83, etc. P = preliminary. F = forecast.

Information contacts: Frederic Suris (202) 786-1824; (red meat & poultry) Linda Bailey (202) 786-1286; (dairy) Sara Short (202) 786-1769.

# U.S. Agricultural Trade

Table 27.—Prices of Principal U.S. Agricultural Trade Products

	Annual			1987				1988		
	1985	1986	1987	Mar	Oct	Nov	Dec	Jan	Feb	Mar
<b>Export commodities</b>										
Wheat, f.o.b. vessel,										
Gulf ports (\$/bu)	3.73	3.19	3.11	3.17	3.17	3.17	3.43	3.53	3.60	3.42
Corn, f.o.b. vessel, Gulf ports (\$/bu)	2.89	2.27	1.95	1.85	2.02	2.10	2.13	2.22	2.24	2.30
Grain sorghum,										
f.o.b. vessel, Gulf ports (\$/bu)	2.64	2.16	1.88	1.87	1.89	2.01	1.98	2.06	2.13	2.17
Soybeans, f.o.b. vessel, Gulf ports (\$/bu)	5.83	5.45	5.55	5.14	5.55	5.88	6.16	6.45	6.46	6.55
Soybean oil, Decatur (cts/lb)	27.03	16.36	15.85	15.03	16.78	17.16	18.77	21.64	20.79	20.08
Soybean meal, Decatur (\$/ton)	127.15	157.62	175.57	146.98	185.86	209.45	214.51	193.30	184.39	191.01
Cotton, B market avg. spot (cts/lb)	58.55	53.47	64.35	54.60	64.22	64.81	62.25	59.70	57.83	59.66
Tobacco, avg. Price at auction (cts/lb)	172.05	153.93	146.50	142.03	152.84	152.38	152.61	150.08	149.27	149.27
Rice, f.o.b. mill, Houston (\$/cwt)	18.49	14.60	13.15	10.50	19.44	21.00	21.00	21.00	24.50	24.06
Inedible tallow, Chicago (cts/lb)	14.33	9.03	13.79	9.77	15.23	15.17	15.56	18.00	17.08	17.25
<b>Import commodities</b>										
Coffee, N.Y. spot (\$/lb)	1.42	2.01	1.09	1.03	1.05	1.19	1.19	1.19	1.28	1.27
Rubber, N.Y. spot (cts/lb)	41.91	42.87	50.65	46.11	53.76	53.10	54.01	54.59	53.75	54.92
Cocoa beans, N.Y. (\$/lb)	.99	.88	.87	.87	.84	.84	.82	.85	.78	.73

Information contact: Mary Teymourian (202) 786-1820.

Table 28.—Indexes of Nominal & Real Trade-Weighted Dollar Exchange Rates

	1987								1988			
	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr
March 1973=100												
Total U.S. trade 1/												
Nominal	96	98	99	99	97	97	92	90	91*	91*	90*	89*
April 1971=100												
Agricultural trade												
Nominal 2/	9,838	12,507	14,245	14,933	15,794	16,859	18,559	21,384	24,555	28,566	33,610	38,783
Real 3/	83	85	85	85	84	83	81*	80*	80*	80*	79*	78*
Soybeans												
Nominal 2/	374	394	412	428	444	460	491	600	596	606	612	611
Real 3/	69	70	71	71	69	69	66*	65*	64*	64*	64*	63*
Wheat												
Nominal 2/	57,302	73,477	83,997	88,101	93,144	99,717	109,724	126,159	145,327	169,807	200,627	232,272
Real 3/	104	106	106	104	103	102	99*	97*	99*	104*	104*	106*
Corn												
Nominal 2/	9,020	11,436	13,013	13,642	14,427	15,392	16,943	19,547	22,412	26,038	30,593	35,262
Real 3/	73	74	75	74	73	72	69*	69*	69*	69*	68*	67*
Cotton												
Nominal 2/	270	269	269	269	292	267	280	282*	282	281	279	281
Real 3/	87	87	88	87	86	86	85*	83*	83*	82*	82*	80*

1/ Federal Reserve Board index of trade-weighted exchange value of the U.S. dollar against 10 other major industrial country currencies, plus Switzerland. These currencies dominate the financing of U.S. total trade. 2/ Nominal values are percentage changes in currency units per dollar, weighted by proportion of agricultural exports from the United States. An increase indicates that the dollar has appreciated. 3/ The real index deflates the nominal series by consumer price changes of the countries involved, resulting in divergence between nominal and real indexes when high-inflation countries figure significantly. The nominal Federal Reserve index shows little divergence between nominal and real indexes because of similar inflation rates among the countries included. \*Preliminary.

Information contact: Edward Wilson (202) 786-1790.

Table 29.—Trade Balance

	Fiscal years*									Feb
	1980	1981	1982	1983	1984	1985	1986	1987	1988 F	1988
\$ million										
<b>Exports</b>										
Agricultural	40,481	43,780	39,097	34,769	38,027	31,201	26,308	27,859	32,000	3,156
Nonagricultural	169,846	185,423	176,308	159,373	170,014	179,236	176,628	202,331	NA	19,570
Total 1/	210,327	229,203	215,405	194,142	208,041	210,437	202,937	230,190	NA	22,726
<b>Imports</b>										
Agricultural	17,276	17,218	15,485	16,373	18,916	19,740	20,875	20,643	20,500	1,924
Nonagricultural	223,590	237,469	233,349	230,627	297,736	313,722	342,855	367,381	NA	33,223
Total 2/	240,866	254,687	248,834	246,900	316,652	333,462	363,730	388,024	NA	35,147
<b>Trade balance</b>										
Agricultural	23,205	26,562	23,612	18,396	19,111	11,461	5,434	7,216	11,500	1,232
Nonagricultural	-53,744	-52,046	-57,041	-71,154	-127,722	-134,486	-166,227	-165,050	NA	-13,653
Total	-30,539	-25,484	-33,429	-52,758	-108,611	-123,025	-160,793	-157,834	NA	-12,421

\*Fiscal years begin October 1 and end September 30. Fiscal year 1987 began Oct. 1, 1986 and ended Sept. 30, 1987.  
1/ Domestic exports including Department of Defense shipments (F.A.S. value). 2/ Imports for consumption (customs value).  
F = forecast. NA = not available.

Information contact: Steve MacDonald (202) 786-1827.

Table 30.—U.S. Agricultural Exports &amp; Imports

	Fiscal years*				Feb	Fiscal years*				Feb
	1985	1986	1987	1988 F	1988	1985	1986	1987	1988 F	1988
	Thousand units					\$ million				
Exports										
Animals, live (no) 1/	996	570	275	--	25	255	344	331	--	28
Meats & preps., excl. poultry (mt)	427	451	548	2/500	42	906	1,012	1,300	--	115
Dairy products (mt)	423	480	445	--	21	414	431	490	500	28
Poultry meats (mt)	234	265	376	400	28	257	282	406	--	28
Fats, oils, & greases (mt)	1,217	1,355	1,220	3/1,100	126	608	477	417	--	49
Hides & skins incl. furskins	--	--	--	--	--	1,325	1,440	1,666	--	188
Cattle hides, whole (no) 1/	25,456	25,596	24,337	--	2,090	1,019	1,131	1,254	--	128
Mink pelts (no) 1/	2,237	2,697	2,760	--	615	60	65	103	--	25
Grains & feeds (mt)	93,903	74,358	90,213	--	8,940	13,285	9,472	9,059	4/11,900	944
Wheat (mt)	28,523	25,501	28,204	37,500	3,901	4,264	3,260	2,877	5/4,400	380
Wheat flour (mt)	718	1,094	1,305	1,500	69	164	203	207	--	7
Rice (mt)	1,972	2,382	2,454	2,300	137	677	648	551	900	51
Feed grains, incl. products (mt)	55,362	36,236	47,605	52,300	3,873	6,884	3,817	3,752	4,600	349
Feeds & fodders (mt)	6,533	8,392	10,113	6/10,000	924	1,004	1,286	1,455	--	138
Other grain products (mt)	795	1,015	750	--	58	293	332	284	--	25
Fruits, nuts, and preps. (mt)	1,907	2,003	2,141	--	197	1,687	1,766	2,049	--	174
Fruit juices incl. froz. (hl) 1/	4,641	3,652	4,362	--	378	200	148	185	--	19
Vegetables & preps. (mt)	1,420	1,442	1,625	--	174	946	997	1,174	--	114
Tobacco, unmanufactured (mt)	257	224	224	200	17	1,588	1,318	1,204	1,200	95
Cotton, excl. linters (mt)	1,277	482	1,306	1,500	161	1,945	678	1,419	2,200	253
Seeds (mt)	289	269	305	--	35	352	367	371	400	49
Sugar, cane or beet (mt)	355	375	582	--	24	65	75	113	--	9
Oilseeds & products (mt)	23,803	27,583	29,653	--	3,796	6,195	6,271	6,293	7,400	937
Oilseeds (mt)	17,886	20,684	21,833	20,000	2,677	4,324	4,394	4,408	--	626
Soybeans (mt)	16,621	20,139	21,322	20,100	2,640	3,876	4,174	4,191	4,600	604
Protein meal (mt)	4,606	5,614	6,786	6,500	910	853	1,132	1,347	1,500	204
Vegetable oils (mt)	1,311	1,284	1,035	--	208	1,018	746	538	--	108
Essential oils (mt)	12	7	8	--	1	105	105	111	--	11
Other	443	568	564	--	76	1,069	1,126	1,271	--	115
Total	125,967	109,862	129,210	142,500	13,638	31,201	26,309	27,859	32,500	3,156
Imports										
Animals, live (no) 1/	2,120	1,885	1,994	--	323	569	637	610	600	106
Meats & preps., excl. poultry (mt)	1,123	1,139	1,282	--	108	2,214	2,248	2,797	--	234
Beef & veal (mt)	674	693	778	790	63	1,295	1,252	1,575	1,600	134
Pork (mt)	416	406	462	500	41	847	900	1,125	1,100	92
Dairy products (mt)	418	400	461	465	25	763	786	849	900	66
Poultry and products 1/	--	--	--	--	--	93	101	112	--	6
Fats, oils, & greases (mt)	21	22	21	--	2	18	17	18	--	2
Hides & skins, incl. furskins 1/	--	--	--	--	--	240	200	304	--	34
Wool, unmanufactured (mt)	43	53	59	--	7	145	160	197	--	41
Grains & feeds (mt)	2,070	2,311	2,336	2,400	313	604	668	727	700	67
Fruits, nuts, & preps., excl. juices (mt)	4,483	4,637	4,835	4,800	483	1,891	1,976	2,178	--	227
Bananas & plantains (mt)	3,022	3,042	3,106	3,100	258	752	740	817	800	68
Fruit juices (hl) 1/	35,112	31,539	33,888	31,500	2,079	995	698	728	--	64
Vegetables & preps. (mt)	2,140	2,199	2,446	2,300	335	1,347	1,560	1,509	1,600	182
Tobacco, unmanufactured (mt)	191	208	224	175	13	556	606	634	500	39
Cotton, unmanufactured (mt)	31	41	38	--	2	17	14	7	--	1
Seeds (mt)	92	89	133	100	15	91	111	156	100	14
Nursery stock & cut flowers 1/	--	--	--	--	--	318	353	369	--	40
Sugar, cane or beet (mt)	2,338	1,905	1,492	1,140	95	912	654	497	--	31
Oilseeds & products (mt)	1,271	1,508	1,572	1,500	139	784	639	579	700	64
Oilseeds (mt)	253	197	165	--	19	98	69	56	--	7
Protein meal (mt)	159	138	245	--	19	17	15	30	--	3
Vegetable oils (mt)	859	1,173	1,162	--	101	670	555	493	--	54
Beverages excl. fruit juices (hl) 1/	15,494	15,488	15,549	--	1,084	1,622	1,848	1,923	--	135
Coffee, tea, cocoa, spices (mt)	1,868	1,940	1,915	--	175	4,983	6,099	4,867	--	420
Coffee, incl. products (mt)	1,128	1,223	1,207	1,200	103	3,244	4,400	3,232	3,000	260
Cocoa beans & products (mt)	539	507	503	525	55	1,285	1,189	1,088	1,100	119
Rubber & allied gums (mt)	799	801	824	840	71	680	615	714	800	76
Other	--	--	--	--	--	900	885	868	--	75
Total	--	--	--	--	--	19,740	20,875	20,643	20,500	1,924

\*Fiscal years begin October 1 and end September 30. Fiscal year 1987 began Oct. 1, 1986 and ended Sept 30, 1987. -- = not available. 1/ Not included in total volume. 2/ Forecasts for footnoted items 2/-6/ are based on slightly different groups of commodities. Fiscal 1987 exports of categories used in the 1988 forecasts were 2/ 503 thousand mt. 3/ 1,204 thousand mt. 4/ 9,302 million. 5/ 3,086 million, i.e. includes flour. 6/ 10,003 thousand mt. 7/ Less than 500,000 F = forecast.

Information contact: Steve MacDonald (202) 786-1827.

Table 31.—U.S. Agricultural Exports by Region

Region & country	Fiscal years*				Feb	Change from year* earlier				Feb
	1985	1986	1987	1988 F	1988	1985	1986	1987	1988 F	1988
	\$ million					Percent				
Western Europe	7,183	6,848	7,203	7,600	889	-22	-5	5	5	12
European Community (EC-12)	6,668	6,432	6,771	7,100	838	-23	-4	5	5	11
Belgium-Luxembourg	470	361	423	--	0	-44	-23	17	--	-100
France	396	431	494	--	0	-22	9	15	--	-100
Germany, Fed. Rep.	900	1,001	1,266	--	158	-28	11	26	--	-9
Italy	677	693	733	--	0	-12	2	6	--	-100
Netherlands	1,926	2,042	1,950	--	239	-14	6	-5	--	14
United Kingdom	628	628	662	--	78	-20	0	5	--	63
Portugal	502	308	268	--	48	-28	-39	-13	--	153
Spain, incl. Canary Islands	832	723	654	--	107	-32	-13	-10	--	26
Other Western Europe	515	415	432	500	51	-16	-19	4	16	24
Switzerland	232	128	145	--	0	-26	-45	-13	--	-100
Eastern Europe	532	447	453	500	59	-28	-16	1	10	51
German Dem. Rep.	81	52	66	--	1	-39	-36	27	--	-50
Poland	126	42	63	--	20	-36	-66	50	--	1,900
Yugoslavia	137	134	131	--	0	-24	-2	-2	--	-100
Romania	88	112	115	--	21	-43	27	3	--	-19
USSR	2,525	1,105	859	1,700	275	1	-56	-40	158	3,338
Asia	11,933	10,494	11,989	14,300	1,276	-22	-12	14	19	45
West Asia (Mideast)	1,452	1,243	1,663	2,000	152	-22	-14	34	20	38
Turkey	129	111	117	--	25	-42	-13	5	--	257
Iraq	371	335	524	700	55	-12	-10	56	35	90
Israel	300	255	244	--	19	-15	-15	-4	--	27
Saudi Arabia	381	335	489	500	27	-23	-12	46	2	-33
South Asia	599	517	345	--	64	-31	-14	-33	--	94
Bangladesh	205	94	111	--	5	31	-54	18	--	-44
India	129	90	93	--	32	-66	-30	3	--	100
Pakistan	228	285	98	300	21	-20	25	-66	206	600
China	239	83	235	500	26	-65	-65	183	113	4
Japan	5,663	5,139	5,553	6,200	599	-18	-9	8	12	47
Southeast Asia	842	724	707	--	97	-31	-14	-2	--	64
Indonesia	204	172	152	--	11	-53	-16	-12	--	-8
Philippines	285	269	259	300	29	-5	-6	-4	16	53
Other East Asia	3,138	2,788	3,485	4,100	338	-14	-11	25	18	37
Taiwan	1,342	1,109	1,354	1,600	115	-5	-17	22	18	32
Korea, Rep.	1,400	1,277	1,693	2,000	191	-23	-9	33	18	54
Hong Kong	396	400	436	500	31	-3	1	9	15	-11
Africa	2,527	2,134	1,784	2,200	210	-12	-16	-16	23	83
North Africa	1,207	1,401	1,279	1,600	165	-22	16	-9	25	96
Morocco	156	159	196	--	17	-54	2	23	--	21
Algeria	220	329	244	500	68	36	50	-26	105	386
Egypt	766	875	761	900	65	-13	14	-13	18	44
Sub-Sahara	1,320	733	505	600	45	-1	-44	-31	19	45
Nigeria	367	158	67	--	3	6	-57	-58	--	50
Rep. S. Africa	189	70	49	--	4	-64	-63	-30	--	-33
Latin America & Caribbean	4,570	3,598	3,765	4,000	269	-13	-21	5	6	17
Brazil	557	445	418	400	8	27	-20	-6	-4	-62
Caribbean Islands	771	752	829	--	73	-7	-2	10	--	-12
Central America	361	334	377	--	32	-9	-7	13	--	14
Colombia	238	137	115	--	13	8	-42	-16	--	117
Mexico	1,566	1,114	1,215	1,300	71	-20	-29	9	7	6
Peru	106	108	140	--	14	-53	2	30	--	56
Venezuela	721	493	459	600	41	-7	-32	-7	31	78
Canada	1,727	1,466	1,776	2,000	158	-11	-15	21	12	18
Oceania	204	216	230	200	20	-6	6	6	-13	5
Total	31,201	26,309	27,859	32,500	3,156	-18	-16	6	15	42
Developed countries	15,225	13,954	15,014	16,300	1,683	-21	-8	8	10	22
Less developed countries	12,680	10,719	11,499	13,500	1,113	-15	-15	7	15	44
Centrally planned countries	3,296	1,636	1,347	2,700	360	-16	-50	-18	101	400

\*Fiscal years begin October 1 and end September 30. Fiscal year 1987 began Oct. 1, 1986 and ended Sept. 30, 1987. F = forecast.  
 Note: Adjusted for transshipments through Canada.

Information contact: Steve MacDonald (202) 786-1827.



# Farm Income

Table 32.—Farm Income Statistics

	Calendar years										
	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988 F
	\$ billion										
1. Farm receipts	114.3	133.8	142.0	144.1	147.1	141.1	146.7	149.2	140.2	138	140 to 144
Crops (incl. net CCC loans)	53.2	62.3	71.7	72.5	72.3	67.1	69.4	74.4	63.6	59	64 to 67
Livestock	59.2	69.2	68.0	69.2	70.3	69.4	72.9	69.8	71.6	74	71 to 74
Farm related 1/	1.9	2.2	2.3	2.5	4.5	4.5	4.4	5.0	5.1	5	4 to 6
2. Direct Government Payments	3.0	1.4	1.3	1.9	3.5	9.3	8.4	7.7	11.8	17	13 to 15
Cash payments	3.0	1.4	1.3	1.9	3.5	4.1	4.0	7.6	8.1	9	6 to 8
Value of P1K commodities	0.0	0.0	0.0	0.0	0.0	5.2	4.5	0.1	3.7	9	7 to 9
3. Total gross farm income (4+5+6) 2/	128.4	150.7	149.3	166.3	163.5	153.1	174.7	166.0	159.5	163	163 to 167
4. Gross cash income (1+2)	117.3	135.1	143.3	146.0	150.6	150.4	155.1	156.9	152.0	156	155 to 159
5. Nonmoney income 3/	9.3	10.6	12.3	13.8	14.3	13.5	13.4	11.8	10.8	10	7 to 9
6. Value of inventory change	1.9	5.0	-6.3	6.5	-1.4	-10.9	6.2	-2.7	-3.3	-2	0 to 1
7. Cash expenses 4/	84.2	101.7	108.1	113.2	112.5	113.3	116.3	109.6	100.1	99	100 to 104
8. Total expenses	103.2	123.3	133.1	139.4	140.0	140.4	142.7	133.7	122.1	119	120 to 124
9. Net cash income (4-7)	33.1	33.4	34.2	32.8	38.1	37.1	38.8	47.3	52.0	57	50 to 55
10. Net farm income (3-8)	25.2	27.4	16.1	26.9	23.5	12.7	32.0	32.3	37.5	45	40 to 45
Deflated (1982\$)	34.9	34.9	18.8	28.6	23.5	12.2	29.7	29.1	32.9	38	34 to 38
11. Off-farm income	29.7	33.8	34.7	35.8	36.4	37.0	38.3	42.5	44.7	46	48 to 50
12. Loan changes 5/:											
Real estate	7.6	13.0	9.3	9.4	4.0	2.5	-0.8	-5.6	-7.3	-6	-3 to -7
Nonreal estate	8.3	10.9	5.9	6.2	3.4	1.0	-0.8	-9.2	-10.5	-9	-2 to -6
14. Rental income plus monetary change	4.1	6.3	6.1	6.4	6.3	5.3	8.9	6.8	7.8	7	7 to 9
15. Capital expenditures 5/	17.9	19.9	18.0	16.8	13.3	12.7	12.5	9.6	8.6	7	7 to 9
16. Net cash flow (9+12+13+14-15)	35.1	43.7	37.5	37.9	38.4	33.6	33.6	31.6	33.4	43	40 to 45

1/ Income from machine hire, custom work, sales of forest products, and other miscellaneous cash sources. 2/ Numbers in parentheses indicate the combination of items required to calculate a given item. 3/ Value of home consumption of self-produced food and imputed gross rental value of farm dwellings. 4/ Excludes capital consumption, perquisites to hired labor, and farm household expenses. 5/ Excludes farm households. Totals may not add because of rounding. F = forecast.

Information contact: Richard Kofl (202) 786-1808.

Table 33.—Balance Sheet of the U.S. Farming Sector

	Calendar years 1/										
	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988 F
	\$ billion										
<b>Assets</b>											
Real estate	601.9	706.2	782.9	784.7	748.8	739.6	639.6	558.9	510.1	530	530 to 540
Non-real estate	175.3	201.6	212.2	212.0	212.2	205.4	208.9	191.2	181.5	181	174 to 179
Livestock & poultry	51.3	61.4	60.6	53.5	53.0	49.7	49.6	46.3	47.6	49	47 to 50
Machinery & motor vehicles	75.5	85.8	93.1	101.4	102.0	100.8	96.9	87.7	80.4	77	71 to 75
Crops stored 2/	25.3	29.2	33.0	29.1	27.7	23.7	29.6	23.1	18.4	19	17 to 21
Financial assets	23.1	25.3	26.5	28.0	29.5	31.3	32.8	34.2	35.0	26	35 to 39
Total farm assets	777.2	907.8	995.1	996.7	961.0	945.0	848.5	750.1	691.6	712	705 to 720
<b>Liabilities</b>											
Real estate 3/	66.7	79.7	89.6	98.7	102.5	104.8	103.7	97.7	88.1	83	75 to 81
Non-real estate 4/	60.7	71.8	77.1	83.6	87.0	87.9	87.1	77.5	66.8	58	53 to 57
Total farm liabilities	127.4	151.6	166.8	182.3	189.5	192.7	190.8	175.2	155.0	141	131 to 136
Total farm equity	649.7	756.2	828.3	814.4	771.5	752.3	657.7	574.9	536.6	571	580 to 590
	Percent										
<b>Selected ratios</b>											
Debt-to-assets	16.4	16.7	16.7	18.3	19.7	20.4	22.5	23.4	22.4	20	17 to 20
Debt-to-equity	19.6	20.0	20.1	22.4	24.6	25.6	29.0	30.5	28.9	25	20 to 24
Debt-to-net cash income	385	454	488	556	497	519	492	370	288	240	230 to 240

1/ As of December 31. 2/ Non-CCC crops held on farms plus value above loan rates for crops held under CCC. 3/ Excludes debt on operator dwellings, but includes CCC storage and drying facilities loans. 4/ Excludes debt for nonfarm purposes. F = forecast.

Information contacts: Ken Erickson or Jim Ryan (202) 786-1798.

Table 34.—Cash Receipts from Farm Marketings, by State

Region State	Livestock & Products				Crops 1/				Total 1/			
	1986	1987	Jan 1988	Feb 1988	1986	1987	Jan 1988	Feb 1988	1986	1987	Jan 1988	Feb 1988
	\$ million 2/											
<b>North Atlantic</b>												
Maine	223	228	21	18	143	168	14	15	365	397	35	33
New Hampshire	72	72	7	6	38	38	3	3	109	109	10	9
Vermont	361	359	33	30	36	35	2	2	398	394	35	32
Massachusetts	131	131	11	10	282	266	10	8	423	396	21	19
Rhode Island	12	12	1	1	63	63	3	3	75	75	4	4
Connecticut	210	195	14	14	162	160	26	9	372	355	40	23
New York	1,809	1,765	161	147	724	720	40	53	2,533	2,484	200	199
New Jersey	150	150	13	12	430	419	18	17	580	569	31	29
Pennsylvania	2,239	2,258	201	180	926	934	91	77	3,165	3,192	292	257
<b>North Central</b>												
Ohio	1,566	1,647	128	118	2,043	1,802	162	111	3,610	3,449	289	278
Indiana	1,852	1,858	131	132	2,258	2,003	182	156	4,110	3,861	313	288
Illinois	2,143	2,306	181	153	4,737	3,903	467	294	6,880	6,209	648	447
Michigan	1,236	1,256	118	104	1,429	1,274	115	111	2,664	2,531	233	214
Wisconsin	4,164	4,360	382	335	892	837	55	44	5,057	5,197	438	378
Minnesota	3,395	3,551	293	294	2,680	2,150	342	120	6,074	5,701	634	401
Iowa	4,982	5,606	486	460	4,124	3,497	575	164	9,106	9,104	1,061	624
Missouri	1,830	2,074	195	158	1,586	1,476	200	121	3,516	3,550	396	279
North Dakota	676	795	78	83	1,623	1,539	104	105	2,299	2,334	183	188
South Dakota	1,525	1,815	204	158	938	812	49	65	2,463	2,627	252	223
Nebraska	4,260	4,907	521	420	2,669	1,984	437	111	6,928	6,891	958	531
Kansas	3,447	3,721	358	340	1,978	1,809	219	110	5,425	5,530	578	449
<b>Southern</b>												
Delaware	402	350	31	25	118	103	4	5	520	453	35	30
Maryland	814	720	63	54	371	346	19	19	1,186	1,066	83	73
Virginia	1,127	1,123	97	75	486	470	26	19	1,613	1,593	123	94
West Virginia	156	157	14	12	71	57	4	3	227	214	18	16
North Carolina	2,174	1,978	140	127	1,608	1,584	55	39	3,782	3,562	195	167
South Carolina	455	442	39	34	440	483	28	14	894	925	67	48
Georgia	1,882	1,716	154	130	1,324	1,255	59	35	3,206	2,971	212	165
Florida	1,000	1,058	93	96	3,688	4,052	594	562	4,688	5,110	686	658
Kentucky	1,311	1,419	115	77	1,079	898	168	55	2,389	2,317	283	132
Tennessee	1,033	1,166	101	83	891	878	78	41	1,924	2,044	179	124
Alabama	1,431	1,359	115	101	578	585	48	27	2,009	1,944	163	123
Mississippi	1,044	999	84	75	741	807	124	72	1,785	1,906	208	147
Arkansas	2,017	1,878	151	128	1,005	1,024	135	60	3,022	2,902	286	189
Louisiana	503	550	44	40	869	898	113	53	1,372	1,449	157	94
Oklahoma	1,875	1,934	203	153	746	698	72	54	2,622	2,631	275	207
Texas	5,516	6,116	491	465	2,928	3,104	383	380	8,444	9,220	874	845
<b>Western</b>												
Montana	720	873	96	61	493	582	54	58	1,213	1,456	150	119
Idaho	884	977	116	96	1,042	1,126	59	50	1,925	2,103	175	146
Wyoming	455	542	38	41	111	114	6	5	566	656	44	46
Colorado	2,218	2,447	154	201	890	861	80	56	3,109	3,308	234	257
New Mexico	708	803	70	53	302	308	20	15	1,010	1,111	90	68
Arizona	699	787	52	54	796	938	220	48	1,495	1,725	271	102
Utah	437	471	43	39	134	125	13	11	570	596	56	50
Nevada	160	160	14	15	72	75	6	5	232	235	20	20
Washington	981	1,017	98	89	1,812	1,823	109	109	2,793	2,840	208	198
Oregon	649	734	56	44	1,135	1,181	72	59	1,784	1,915	128	104
California	4,446	4,548	347	337	9,602	10,183	944	594	14,049	14,731	1,290	931
Alaska	10	10	1	1	19	21	1	1	29	31	2	2
Hawaii	84	84	7	7	491	488	41	37	575	572	48	44
<b>United States</b>	<b>71,573</b>	<b>75,483</b>	<b>6,564</b>	<b>5,876</b>	<b>63,612</b>	<b>61,057</b>	<b>6,648</b>	<b>4,180</b>	<b>135,185</b>	<b>136,540</b>	<b>13,212</b>	<b>10,056</b>

1/ Sales of farm products include receipts from commodities placed under CCC loans minus value of redemptions during the period.  
 2/ Estimates as of the end of current month. Rounded data may not add.

Information contact: Roger Strickland (202) 786-1804.

Table 35.—Cash Receipts from Farming

	Annual						1987				1988	
	1982	1983	1984	1985	1986	1987	Feb	Oct	Nov	Dec	Jan	Feb
	\$ million											
Farm marketings & CCC loans *	142,594	136,580	142,314	144,193	135,185	136,540	8,899	15,451	15,420	12,093	13,212	10,056
Livestock & products	70,257	69,437	72,936	69,780	71,573	75,483	5,471	7,198	6,696	5,959	6,564	5,876
Meat animals	40,917	38,893	40,832	38,589	39,137	44,867	3,128	4,607	4,004	3,496	3,994	3,614
Dairy products	18,234	18,763	17,844	18,063	17,824	17,806	1,398	1,501	1,465	1,499	1,570	1,413
Poultry & eggs	9,520	9,979	12,192	11,191	12,678	10,871	834	964	967	839	841	726
Other	1,586	1,801	1,968	1,937	1,934	1,939	111	126	260	125	159	123
Crops	72,338	67,143	69,378	74,413	63,612	61,057	3,428	8,253	8,724	6,134	6,648	4,180
Food grains	11,412	9,713	9,576	9,080	5,948	5,401	251	613	348	424	421	421
Feed Crops	17,409	15,535	15,831	22,479	17,849	13,085	816	1,775	2,686	1,334	1,619	850
Cotton (lint and seed)	4,457	3,705	3,270	3,730	2,920	3,945	135	801	792	667	712	439
Tobacco	3,342	2,768	2,841	2,722	1,918	1,833	26	208	159	386	204	30
Oil-bearing crops	13,817	13,546	13,894	12,595	10,507	10,769	558	2,352	2,011	1,115	1,486	730
Vegetables & melons	8,063	8,462	9,142	8,558	8,705	9,207	565	862	428	415	1,014	525
Fruits & tree nuts	6,846	6,064	6,768	6,836	6,900	7,806	497	872	998	763	537	535
Other	6,993	7,352	8,057	8,413	8,865	9,011	579	771	1,303	1,030	653	650
Government payments	3,492	9,295	8,430	7,704	11,813	16,747	2,464	4,186	300	1,417	17	71
Total	146,086	145,875	150,744	151,897	146,998	153,287	11,363	19,637	15,720	13,510	13,229	10,127

\* Receipts from loans represent value of commodities placed under CCC loans minus value of redemptions during the month.

Information Contact: Roger Strickland (202) 786-1804.

Table 36.—Farm Production Expenses

	Calendar years									
	1979	1980	1981	1982	1983	1984	1985	1986	1987 F	1988 F
	\$ million									
Feed	19,314	20,971	20,855	18,592	21,725	19,852	18,015	16,179	15,600	16,000 to 18,000
Livestock	13,012	10,670	8,999	9,684	8,814	9,498	8,996	9,609	11,600	10,000 to 12,000
Seed	2,904	3,220	3,428	3,172	2,993	3,448	3,350	2,984	2,600	2,200 to 3,200
Farm-origin inputs	35,230	34,861	33,282	31,448	33,532	32,798	30,361	28,772	29,800	29,000 to 33,000
Fertilizer	7,369	9,491	9,409	8,018	7,067	7,429	7,259	5,787	5,400	5,500 to 6,500
Fuels & oils	5,635	7,879	8,570	7,888	7,503	7,143	6,584	4,790	4,500	4,200 to 5,200
Electricity	1,447	1,526	1,747	2,041	2,146	2,166	2,150	2,121	2,200	2,000 to 3,000
Pesticides	3,436	3,539	4,201	4,282	4,154	4,767	4,817	4,331	4,000	3,600 to 4,600
Manufactured inputs	17,887	22,435	23,927	22,229	20,870	21,505	20,810	17,029	16,100	16,000 to 19,000
Short-term interest	6,868	8,717	10,722	11,349	10,615	10,396	8,821	7,795	6,500	5,500 to 6,500
Real estate interest 1/	6,190	7,544	9,142	10,481	10,815	10,733	9,878	9,131	8,000	7,500 to 8,500
Total interest charges	13,058	16,261	19,864	21,830	21,430	21,129	18,699	16,926	14,500	13,000 to 15,000
Repair & operation 1/ 2/	6,754	7,075	7,021	6,428	6,529	6,416	6,370	6,426	6,600	6,500 to 7,500
Hired labor	8,981	9,293	8,931	10,075	9,726	9,729	9,792	9,875	10,300	10,000 to 12,000
Machine hire & custom work	2,063	1,823	1,984	2,025	1,896	2,170	2,184	1,791	1,700	1,200 to 2,200
Marketing, storage, & transportation	3,162	3,070	3,523	4,301	3,904	4,012	4,127	3,652	3,500	3,500 to 4,500
Misc. operating expenses 1/	6,771	6,881	6,909	7,262	8,439	8,450	7,942	7,344	7,800	7,000 to 8,000
Other operating expenses	27,732	28,142	28,368	30,889	31,143	31,433	30,579	29,519	29,900	29,000 to 34,000
Capital consumption 1/	19,345	21,474	23,573	24,287	23,873	23,105	20,891	18,997	17,500	16,000 to 17,000
Taxes 1/	3,871	3,891	4,246	4,036	4,469	4,059	4,231	4,125	4,200	3,700 to 4,700
Net rent to non-operator landlord	6,182	6,075	6,184	6,059	5,060	8,640	8,124	6,684	7,400	7,300 to 8,300
Other overhead expenses	29,398	31,440	34,003	34,381	33,402	35,805	33,247	29,806	29,100	27,000 to 30,000
Total production expenses	123,305	133,139	139,444	139,978	140,375	142,669	133,696	122,052	119,400	120,000 to 124,000

1/ Includes operator dwellings. 2/ Beginning in 1982, miscellaneous operating expenses includes other livestock purchases and dairy assessments. Totals may not add because of rounding. F = forecast.

Information contacts: Richard Kadi (202) 786-1808; Chris McGath (202) 786-1804.

Table 37.—CCC Net Outlays by Commodity &amp; Function

Commodity/Program	Fiscal years										
	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988 E	1989 E
	\$ million										
Feed grains	1,144	1,286	-533	5,397	6,815	-758	5,211	12,211	13,967	12,568	11,050
Wheat	308	879	1,543	2,238	3,419	2,536	4,691	3,440	2,836	1,083	1,524
Rice	49	-76	24	164	664	333	990	947	906	189	320
Upland cotton	141	64	336	1,190	1,363	244	1,553	2,142	1,786	42	229
Tobacco	157	-88	-51	103	880	346	455	253	-346	-433	-323
Dairy	24	1,011	1,894	2,182	2,528	1,502	2,085	2,337	1,166	1,227	936
Soybeans	4	116	87	169	288	-585	711	1,597	-476	-1,069	-305
Peanuts	27	28	28	12	-6	1	12	32	8	3	1
Sugar	313	-405	-121	-5	49	10	184	214	-65	-14	--
Honey	-2	9	8	27	48	90	81	89	73	70	56
Wool	39	35	42	54	94	132	109	123	152	125	127
Operating expense	97	157	159	294	328	362	346	457	535	568	583
Interest expenditure	238	518	220	-13	3,525	1,064	1,435	1,411	1,219	836	1,196
Export programs	417	-669	-940	65	398	743	134	102	276	449	512
Other	656	-113	1,340	-225	-1,542	1,295	-314	486	371	2,013	1,234
Total	3,612	2,752	4,036	11,652	18,851	7,315	17,683	25,841	22,408	17,657	17,140
Function											
Price support loans	2	-66	174	7,015	8,438	-27	6,272	13,628	12,199	8,222	5,514
Direct payments	1,811	418	1,030	1,491	3,600	2,117	7,827	6,746	5,862	3,983	6,023
Purchases	10	1,681	1,602	2,031	2,540	1,470	1,331	1,670	-479	-633	399
Producer storage payments	247	254	32	679	964	268	329	485	832	565	522
Processing, storage, & transportation	128	259	323	355	665	639	657	1,013	1,659	1,494	1,058
Operating expense	97	157	159	294	328	362	346	457	535	568	583
Interest expenditure	238	518	220	-13	3,525	1,064	1,435	1,411	1,219	836	1,196
Export programs	417	-669	-940	65	398	743	134	102	276	449	512
Other	662	200	1,436	-265	-1,607	679	-648	329	305	2,173	1,333
Total	3,612	2,752	4,036	11,652	18,851	7,315	17,683	25,841	22,408	17,657	17,140

E = estimated in the fiscal 1989 President's Budget. Minus (-) indicates a net receipt (excess of repayments or other receipts over gross outlays of funds).

Information contact: Richard Pazdalski (202) 447-5148

## Transportation

Table 38.—Rail Rates; Grain &amp; Fruit/Vegetable Shipments

	Annual			1987				1988		
	1985	1986	1987 P	Mar	Oct	Nov	Dec	Jan	Feb	Mar
Rail freight rate index 1/ (Dec 1984=100)										
All products	100.0	100.7	100.1	99.8	100.2	100.2	100.3 P	103.3 P	103.3 P	103.4 P
Farm products	99.0	99.6	99.3	99.1	99.8	99.7	99.4 P	101.9 P	102.0 P	102.3 P
Grain	98.3	98.9	98.7	98.8	99.2	99.1	98.5 P	101.2 P	101.2 P	101.6 P
Food products	100.1	99.9	98.6	98.4	98.6	98.7	98.7 P	102.4 P	102.4 P	102.4 P
Grain										
Rail carloadings (thou cars) 2/	22.9	24.4	29.0	27.1	33.9 P	30.8 P	29.0 P	30.8 P	33.2 P	34.2 P
Fresh fruit & vegetable shipments										
Piggy back (thou cwt) 3/ 4/	602	628	576	501	427 P	495 P	478 P	428 P	473 P	484 P
Rail (thou cwt) 3/ 4/	532	563	655	682	631 P	716 P	742 P	785 P	813 P	835 P
Truck (thou cwt) 3/ 4/	8,298	9,031	9,181	8,766	8,497 P	8,605 P	8,383 P	8,980 P	8,766 P	9,622 P
Cost of operating trucks hauling produce 5/										
Owner operator (cts/mile)	116.1	113.1	116.3	115.1	117.9	117.8	118.5	118.1	118.3	118.3
Fleet operation (cts/mile)	116.7	113.6	116.5	114.9	117.8	118.1	118.3	118.0	118.1	117.7

1/ Department of Labor, Bureau of Labor Statistics. 2/ Weekly average; from Association of American Railroads. 3/ Weekly average; from Agricultural Marketing Service, USDA. 4/ Preliminary data for 1987 and 1988. 5/ Office of Transportation, USDA. P = Preliminary.

Information contact: T.O. Hutchinson (202) 786-1840.



## Indicators of Farm Productivity

Table 39.—Indexes of Farm Production Input Use & Productivity

	1978	1979	1980	1981	1982 <sup>1</sup>	1983	1984	1985	1986	1987 2/
1977=100										
Farm output	104	111	104	118	116	96	112	118	111	109
All livestock products 3/	101	104	108	109	107	109	107	110	110	111
Meat animals	100	103	107	106	101	104	101	102	100	98
Dairy products	99	101	105	108	110	114	110	117	117	116
Poultry & eggs	106	114	115	119	119	120	123	128	133	143
All crops 4/	102	113	101	117	117	88	111	118	109	106
Feed grains	108	116	97	121	122	67	116	134	123	105
Hay & forage	106	108	98	106	109	100	107	106	106	102
Food grains	93	108	121	144	138	117	129	121	107	106
Sugar crops	101	94	97	107	96	93	95	97	106	112
Cotton	76	102	79	109	85	55	91	94	69	102
Tobacco	106	80	93	108	104	75	90	81	63	64
Oil crops	105	129	99	114	121	91	106	117	110	106
Cropland used for crops	97	100	101	102	101	88	99	98	94	87
Crop production per acre	105	113	100	115	116	100	112	120	116	122
Farm input 5/	102	105	103	102	99	97	95	92	87	NA
Farm real estate	100	103	103	104	102	101	97	95	93	NA
Mechanical power & machinery	104	104	101	98	92	89	85	81	76	NA
Agricultural chemicals	107	123	123	129	118	105	121	121	109	NA
Feed, seed & livestock purchases	108	115	114	108	107	109	105	105	102	NA
Farm output per unit of input	101	105	101	116	118	99	118	128	127	NA
Output per hour of labor										
Farm 6/	104	113	109	123	125	99	121	139	139	NA
Nonfarm 7/	101	99	99	100	99	102	105	106	108	NA

1/ For historical data and indexes, see Economic Indicators of the Farm Sector: Production and Efficiency Statistics, 1985, ECIFS 5-5. 2/ Preliminary indexes for 1987 based on January 1988 Crop Production: 1987 Summary report and other releases of the Agricultural Statistics Board, NASS. 3/ Gross livestock production includes minor livestock products not included in the separate groups shown. It cannot be added to gross crop production to compute farm output. 4/ Gross crop production includes some miscellaneous crops not in the separate groups shown. It cannot be added to gross livestock production to compute farm output. 5/ Includes other items not included in the separate groups shown. 6/ Economic Research Service. 7/ Bureau of Labor Statistics. NA = not available.

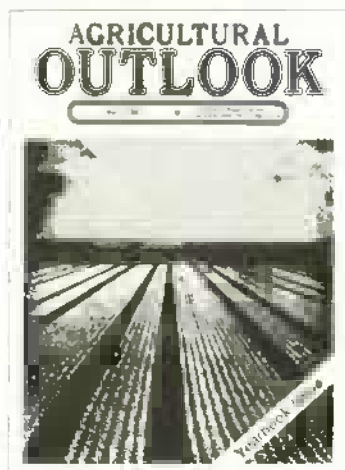
Information contact: Jim Hauver (202) 786-1459.

## Food Supply and Use

Table 40.—Per Capita Consumption of Major Food Commodities (Retail Weight)

(See the May 1988 issue.)

Information contact: Judy Putnam (202) 786-1870.



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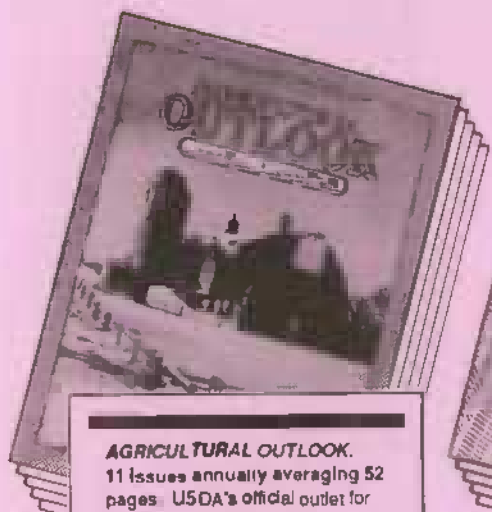
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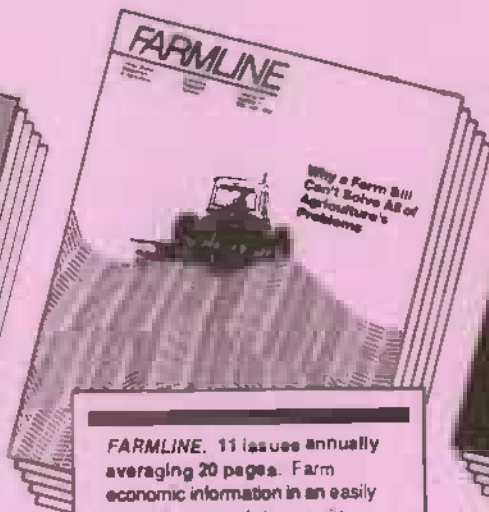
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